Two Clinical Lectures
ON
PRIMARY SYPHILITIC CHANCRES.

Delivered at the London Hospital on Feb. 16th and March 2nd, 1900,

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LECTURE II.[1]

Delivered on March 2nd, 1900.

GENTLEMEN,—With regard to the bubo that accompanies primary syphilitic chancres, in the last lecture we noted that out of 125 cases of which I had careful records it was not absent in a single one, and that in only two out of the 125 cases had it the unusual characters of suppuration or of inflammation. The characters of the bubo are really in many cases of greater diagnostic value than are those of the actual sore. It has been said that sometimes the bubo is absent, and some French observers have estimated that in about three per cent. the glands are not appreciably enlarged. Well, you see, there are obvious fallacies. The patient may be stout and his inguinal glands may be very difficult to examine, and I believe that this fact probably accounts for most of these supposed exceptions. The bubo is, at any rate, practically constant and can be found if careful search be made for it. Almost the only case which I could personally adduce in favour of a belief that sometimes the nearest lymphatic glands are not enlarged with the primary syphilitic sore was, briefly, as follows. A man came with a large hard chancre at the furrow of the penis and with tortuous lymphatic cords running up the penis. He was repeatedly examined during the four weeks that ensued after the sore had been noticed, and no enlargement whatever of the inguinal glands could be detected during the whole of this time. He was not at all a stout subject. I regret that the case was then lost sight of, and therefore it is only an incomplete observation. I mention it merely to emphasise the slight evidence in favour of the belief that the bubo is sometimes entirely absent in the case of primary syphilitic chancres. On the other hand, it has been asserted that sometimes there occurs a syphilitic bubo without any primary sore, the so-called "*bubon d'emblée*." That I believe in, though it is excessively rare. And recollect there is a fallacy, with regard to women especially, that the primary sores are very easily overlooked, and although a primary syphilitic chancre, as a rule, will persist (unless diagnosed and properly treated) for weeks and even months, there are some primary syphilitic sores which are quite insignificant and which very soon spontaneously heal leaving no trace behind. As will be readily understood, in women it is often difficult to find the primary sore. One often comes across cases of secondary syphilis in women in whom no history of a sore or evidence of a bubo can be found. Some of these cases are accounted for by the chancre being on the cervix uteri, in which case the bubo will be within the abdomen. The vaginal wall is not a common site for chancres, but the cervix uteri is more often affected and I have seen several examples.

You all know the characters of the typical syphilitic bubo, how the oblique set of inguinal glands—sometimes only the innermost of them, sometimes the more central ones, occasionally the highest glands of the vertical femoral set—are enlarged. Some of the lymphatics of the penis and scrotum can occasionally be dissected out into the upper glands of the vertical femoral set, confirming what has been observed clinically. The bubo is often situated on the opposite side to the primary sore—e.g., the sore being on the right side of the penis the chief bubo may be on the left side owing to the crossing of the lymphatics. As you know, the inguinal glands may be swollen first on one side and then after a time those of the opposite side become also affected. Enlargement of the inguinal glands may develop during the secondary stage as part of the general adenopathy. For instance, you may see a case of chancre of the lip in which the inguinal glands are enlarged, due to general infection through the blood-stream.

A few words as to what may be termed the giant bubo; and the following case may be quoted since it illustrates many points of interest in connexion with syphilis. A young man, aged twenty-two years, florid and healthy-looking, with a good family history (though phthisical tendencies were not excluded from it), contracted a chancre on his lower lip in October, 1894. He went to a medical man, but it was not until January, 1895—that is to say, four full months afterwards—that the syphilitic nature of the sore was recognised and the proper treatment instituted. There were then large buboes of both sides of the neck. He took mercury for only three months, and then irregularly, so that one would say that the treatment was very imperfect. He came to me in November, 1895—that is to say, over a year since the contraction of the syphilis. The site of the chancre was then conspicuous, and he still had a huge bubo on each side of the neck. These buboes were painful and threatened to break down, looking exactly like masses of tuberculous glands. However, in the belief that they were syphilitic I prescribed four grains of grey powder per diem and made him rub in oleate of mercury ointment. After a time both tonsils became ulcerated and had to be cauterised with nitrate of silver, sulphate of copper, &c., but the bubo did not disappear. He was markedly anæmic from the first, and though he had no cough and no signs of mischief in the lungs I could not help thinking that it might be a case of tuberculosis in a syphilitic patient. Iron was prescribed with the mercury, and at length, after nine months of steady treatment, or nearly two years after the infection, the glands wholly subsided without breaking down at all. I must admit that at one time I was inclined to advise him to have them excised, believing that they were in part tuberculous. But they all went down, so one may be certain that it was a case (and a very unusual one) of syphilitic adenopathy. In September, 1896, at the end of two years after infection, and after nine months of steady treatment by mercury, he came again with painful synovitis of the knees. This subsided under iodide of potassium and mercury and cod-liver oil, leaving no trace behind. In March, 1897, at the end of two and a half years after infection, he was florid and healthy again, and there was no trace of enlargement of the glands. He still showed an interesting symptom, that of recurrent induration at the site of the chancre in the lower lip, which soon yielded to treatment.

This case illustrates, first, the danger of overlooking a primary chancre—for it was four months before the right diagnosis was made; secondly, the difficulty in getting the usual rapid therapeutic effects of mercury in such a neglected case; thirdly, the long persistence of huge buboes, their slow but complete yielding to treatment, and the occurrence of relapsing induration at the site of the sore; and, finally, the coincidence in the same subject of symmetrical syphilitic joint-disease and syphilitic disease of the lymphatic glands.

Although syphilitic joint disease and syphilitic gland disease are both rare—I am not thinking of primary buboes, but tertiary syphilitic gland disease—there is a strong tendency for both to occur in the same individual. Now is not this of extreme interest in comparing syphilis with tubercle? In tubercle disease of lymphatic glands and disease of joints are two of the main symptoms, and it is so with syphilis. If you look up the literature you will find many cases recorded in which a patient who has had tertiary syphilitic gland disease subsequently has syphilitic arthritis, or *vice versâ*. The case which I have just narrated raises the question, which is discussed from time to time, Is syphilis which is contracted from congenital chancres more severe than that which is contracted from the ordinary primary chancres on the genitals? The answer is a very simple one. The reason why these cases often seem to be more severe than those following genital chancres is simply that the nature of the sore is overlooked. They are exceptional cases in this, that for perhaps two, four, or six months the nature of such a sore is not diagnosed, the patient, therefore, has no treatment, the virus gets a thorough hold on the system (if I may use the term), and one knows that in these cases of severe primary and secondary syphilis with much delayed treatment you will have more difficulty in overcoming the virus, and the later symptoms will probably be severe.

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That leads me to state briefly my belief as regards severe and mild attacks of syphilis. You ask yourself the questions, Is syphilis the same disease in all its victims? Are there mild and are there severe attacks, or does the severity depend wholly on the individual? As to whether the dose of the poison varies we know and can say nothing. I certainly believe in one man having a mild attack of syphilis and another a very severe one, but the influence of treatment is a most important thing and especially the date at which that treatment is begun and the persistence with which it is followed up. At the same time it must be granted that, apart from treatment, some cases are comparatively mild. This may partly account for the strange statement seen in some of the books, especially foreign ones, that case after case of undoubted syphilis was "cured" with a dozen subcutaneous injections of small doses of mercury. It is certain that ordinary cases of syphilis are not, and cannot be, cured by any such treatment. We know this fact also—that where secondary symptoms have been mild, either as a result of treatment or not, there is no guarantee (if mercury be not continued for a long time) that tertiary symptoms will not occur or may not be very severe. Examples of this are seen in those who wilfully conceal their malady or in whom it is not diagnosed. I will mention to you an instance. An elderly married man, with every inducement to conceal his frailty, deliberately deceived a practitioner as to the nature of a secondary syphilitic eruption which was at first of the ordinary erythematous type, and then it became much more complicated, ultimately ending in a very severe attack of syphilitic pemphigus. Although he had the remains of a chancre present for several months he persuaded his medical adviser that his symptoms were due to anything but syphilis, and the consequence was that he never had any specific treatment until he got into such a deplorable state that he very nearly died from syphilitic cachexia. The case would probably have caused no trouble whatever had mercurial treatment been commenced early.

Now, a word or two as to phagedenic chancres. You will probably not see many nowadays, but they may give a great deal of trouble. We will briefly note that the term is very vaguely used. Many primary syphilitic sores are destructive without being really phagedenic, especially when they occur in concealed sites—e.g., at the furrow of the penis—and become complicated by a great number of septic organisms. Any primary syphilitic sore may be phagedenic in a sense, but of the true acute destruction, the real rapid phagedena, one would say that it is not necessarily a sign of syphilis. The following are some of the characters of this true phagedena. The incubation stage—the period between the inoculation and the development of the sore—is very short (generally only a few days), much shorter than is the case with a syphilitic sore which assumes its typical characters in three weeks. The bubo is slight or absent with a phagedenic sore and mercury has little or no effect in checking the destructive process. Finally, many cases of phagedena—I do not say all—escape secondaries. These are briefly the conclusions one has learnt from a study of a good number of cases of phagedena. Although it usually occurs in concealed sores, where there is phimosis, it may attack the more open parts, such as the vaginal orifice. I remember one case in which the greater part of the vulva and labia on both sides were destroyed by a rapid phagedena, not followed by syphilis. I would, of course, impress upon you the significance with concealed sores of hæmorrhagic discharge. A little oozing of blood may mean that the ulcer is rapidly eating into the tissues, and if there be a foul-smelling discharge the two signs indicate that the prepuce should be slit up without delay and the sore thoroughly exposed. It should be thoroughly cleaned under an anæsthetic and either pure carbolic or acid nitrate of mercury should be applied. The patient should then be kept in a bath of very weak solution of bichloride of mercury, the hot water being frequently changed, and he should remain for some days in this bath. The continuous immersion and exposure of the sore to the action of the water should be employed until the sore begins to take on a healthy appearance. The value of continuous bath treatment in phagedenic chancres, although it has been known to the profession for very many years, is forgotten now and then, and at the last meeting of the British Medical Association two cases of fatal phagedena were narrated (in one the patient was a woman), the chief point of which to my mind was that the bath or immersion treatment had not been thought of or tried in either. All sorts of escharotics had been used, but no immersion treatment, yet that is the safest, least painful, and simplest of all the methods. There is of course danger of severe hæmorrhage in phagedenic chancres. I have known troublesome bleeding occur from the dorsal artery of the penis under such circumstances. Then there is the risk when the sore is on the under surface of the penis of ulceration into the urethra and fistula. I have seen several cases where the glans penis had been wholly eaten away, and of course a stricture followed in the urethra. You know that tertiary syphilis does cause phagedena, and in one such case, a rather slow phagedena of the penis where the glans had been reduced to a mere fragment and the penis was entirely mis-shaped and distorted, I was driven to amputate at the man's own express wish, and gave him a decent-looking organ, although it was shorter than usual.

The question of phagedena leads me to mention a peculiar form of primary sore which, though it is not phagedenic, is somewhat alarming in appearance, and that is the primary chancre which resembles a malignant pustule. Its characters are these: there is a great deal of surrounding inflammation and the part is much swollen: in the centre is a sore covered with a thick blackish dry scab looking like a dry eschar. The ugly term "ambustiform" has been recently applied to this form of chancre, suggesting to classical minds the slough produced by the cautery. I believe these chancres are always syphilitic, but they are not common.

Now we come to the important question of the difficulties in the diagnosis of primary infecting sore—difficulties which every surgeon is certain to be confronted with. First, as to the decision between "soft sores" and true infective chancres. The term "soft sore" is so useful that we shall be obliged to retain it. You know that a soft sore may become indurated after the lapse of a certain time. The soft sore is said to be due to a specific bacillus, but it is premature to speak positively as to that. As to the true primary chancre, we are ignorant as to what sort of bacillus causes the infection or whether it is a micro-organism at all, and this in spite of the work of a great number of skilled bacteriologists. As you know, soft non-infecting sores are attended in many cases by abscesses in the groin, and the sores themselves are usually multiple. We saw that the primary infecting sores of the genitals were multiple in only about one in five cases. Out of 125 examples of primary infecting sores these were single in a little over 100. Where you have eight or ten or more pus-secreting sores you can feel little doubt about the diagnosis, especially if the glands are already painful and inflamed. But it must not be forgotten that one of these soft sores may take on induration and prove infective. Note that the longer the time which has elapsed before the sore is noticed the greater the probability is that it is infective. The soft sore chiefly comes on from three to five days after infection; the primary chancre may not show itself for from two to three weeks or even longer. The character of the bubo is often of more importance than the chancre; that point we have already dwelt upon. But I want to urge this point, that those who have had the most experience in the diagnosis become more and more cautious in giving a final opinion until a certain amount of time has elapsed from infection. The patient will say, "Is this sore a primary chancre or not? When can you say positively?" The answer is that in three or four weeks after infection you can generally decide, but that before that time no one can tell with certainty, and that sometimes it may be six weeks or even more before you can say positively. Every one of us will, in all probability, make mistakes in diagnosing between soft sores and primary syphilitic sores. The more experience one has the more cautious one gets in giving a positive diagnosis until a certain time had elapsed. I wish that bacteriological examination were likely to be of assistance, but I doubt if it ever will be. Even granted that the soft chancre has a peculiar bacillus its presence would not prove that the patient had not acquired the syphilitic virus also. We must therefore go mainly on the clinical investigation of the chancre and bubo from all their aspects, not forgetting to examine for indurated lymphatic cords.

It may be said that the mercurial treatment can now be conducted with so little damage to the general health that in any case where you are doubtful as to diagnosis the real benefit of the doubt will come in giving the patient mercury. That is to some extent true, but it is not a very satisfactory position, say, at the end of six months after you have been

giving mercury, to feel still doubtful as to the true nature of the case. The patient may ask you at the end of that time whether he has had syphilis or not, and whether he may marry in a year or two, or whether he is to go on with the treatment for two years. You will at once see that the position then is a difficult one. Still, some authorities hold that when in doubt you should give mercury. The general opinion seems to be veering round towards that, and it is so because nowadays mercury can be given with proper safeguards with so little damage to the patient's health, occupation, or his general habits that it has become a mere bagatelle to go in for nine or eighteen months' mercurial treatment. Still, you should certainly wait a little time before making a diagnosis. I may mention, by the way, that I knew of a case where a gentleman went to a surgeon, a specialist, on the day after contagion—that is to say, within 24 hours. The gentleman said, "I think I have got syphilis." There was nothing abnormal to be seen, not even an abrasion. The surgeon said, "You had better have mercurial injections; anyhow it will prevent your getting tertiary symptoms." So that though there was never the slightest symptom of venereal disease this man went through a course of mercurial injections until he got tired of them. That is perhaps going to extremes and I do not think it should be held up as an example to follow.

There are some interesting cases of tertiary ulceration of the genitals which may readily lead you astray. The patient himself or herself thinks that the ulcer is syphilitic and you are apt to treat such lesions as primary sores. I show you a picture of a primary sore which fairly resembles a gummatous ulcer in its shape and in the slough. I will now give you the notes of a case in which I made the mistake myself. A man had slight secondary syphilis in 1893. He was treated with green iodide of mercury and, as generally happens when green iodide of mercury is given, the treatment was imperfect. In 1895 he suffered from severe ulceration of his cheek and palate. He was given liquor hydrargyri and iodide of potassium for 12 months. In 1896, three years after his secondary symptoms, he came to me with a supposed chancre spreading round the furrow of the prepuce. It was 10 days after suspicious intercourse and it looked uncommonly like a fresh chancre. As he had had syphilis two years before it was hardly likely to be a second infection. I treated it locally with black-wash, calomel, iodoform, and pure carbolic acid applied repeatedly and vigorously. It was only at the end of two months that I recognised that it was merely a tertiary sore and I gave iodide of potassium with the result that it speedily melted away. This example may impress upon you the fact that tertiary sores on the genitals are very apt to give rise to mistakes in diagnosis. I have known of a number of cases of which I will mention only one or two of the most interesting.

A woman came to the out-patient department here with a large inveterate ulcer of the leg which was diagnosed to be epitheliomatous. The leg was amputated through the knee-joint and the microscopical sections, which I saw myself, were not conclusive as to epithelioma; they were more like those of a gummatous ulcer. Six months later she came under my care with a large hard-edged ulcer of the left labium majore and some swelling of the inguinal lymphatic glands. This ulcer was very like a commencing epithelioma. On the other hand, it was fairly like a tertiary ulcer. Having seen these sections of the ulcer of the leg I thought that it was tertiary syphilis. But as it was in a perfectly convenient position for excision and she was an elderly woman, and as therefore there was likelihood that it might be epithelioma, I excised it, and microscopical examination again negatived epithelioma and pointed strongly to tertiary syphilis.

A man who admitted having had gonorrhœa ten years and two years previously came to me on account of a large gummatous ulcer on the under surface of the penis, unaccompanied by any marked enlargement of the lymphatic glands. There had been exposure to contagion within a short time. On examining his body all over I found a large inflamed node on the right clavicle which he had not mentioned, and another softening one over the manubrium sterni, proving the tertiary nature of his complaint, although we could get no history from him of primary syphilis. All the lesions were cured by iodide of potassium.

Cases of extreme interest sometimes occur of what is called relapsing induration at the site of a former chancre. As a matter of fact, my father and Professor Fournier were the first to call attention to these peculiar cases. The main facts about them are the following. At the site of a primary chancre, years after the infection and with or without exposure to fresh risk, induration occurs, which as a rule does not lead to ulceration but persists an indefinite time, sometimes, however, breaking down in the centre. It is hardly ever accompanied, as far as my experience has gone, with marked enlargement of the inguinal glands. It may occur quite apart from any fresh contagion, though it is curious how often you get a history of this. The recurring or relapsing indurations may occur any number of years after the primary disease, and one's belief is that they are of the same nature as gummatous infiltrations. That is the best way of regarding them and it emphasises the fact that as a rule iodide of potassium effects a speedy cure and is the best drug to give. The subject is of great interest with regard to the germ theory of syphilis. We know how closely syphilis imitates tubercle in many of its effects and that residual tuberculous abscesses or relapses of tuberculous affections in the lungs and the joints occur in an individual many years after the disease has quieted down. It is tempting to suggest that these relapsing indurations and gummatous ulcerations at the site of primary sores are due to a sort of re-awakening of the germs of the syphilitic virus which have lain dormant for years close to the scar. But it is pure theory; we cannot dogmatise as to the syphilitic virus; we do not even know that it is a bacillus.

I would impress upon you the importance of not overlooking an epithelioma of the genital surfaces (especially of the penis), thinking it is a primary sore. Most of the cases of epithelioma of the penis which I have operated upon here—and they amount to a considerable number—have been those of patients who have come up to the Lock Hospital believing that they had a venereal sore. In the last case, which was here a week or two ago, the patient had been sent up from the country and had been for six months under treatment with epithelioma of the penis, the treatment having been, however, entirely anti-syphilitic. I need not impress upon you the danger of making that mistake in diagnosis. It does not matter very much, perhaps, if you overlook a primary sore for a few weeks, but it is of the greatest importance that an epithelioma should not be neglected or overlooked. And I would say this: Never prolong unduly the trial of mercury and iodide of potassium in a doubtful case. If the ulcer is a primary chancre it melts away, as a rule, under mercury properly given. If it be epithelioma no effect will be produced in the course of two or three weeks, and that time should be enough to enable one to come to a decision as to the nature of the sore. Epithelioma of the penis may occur either in the form of a cauliflower growth or of a disc of induration, the latter being extremely like a primary sore, and if it be concealed by the prepuce the diagnosis is undoubtedly difficult. In doubtful cases one must slit up the prepuce, and if that be done the difficulty in diagnosis is soon cleared up. It may here be noted that molluscum contagiosum occurs on the genitals not infrequently. I have seen many cases and have a strong belief that they are usually due to inoculation during intercourse. If one of these molluscum nodules is shed spontaneously the ulcer left may possibly be mistaken for a chancre.

The following case is true though it may appear incredible. A man came with a sore on his penis which proved to be due to vaccination. The history was this. He was a married man and his wife was suckling a child who had lately been vaccinated. In some way the vaccination virus had been conveyed from the infant to the genitals of the mother and she had a vaccination sore on her vulva. The man also was susceptible and contracted a vaccination sore on the penis from his wife.

As to the treatment of primary sores I will be very brief. As a rule, whether the sore be hard or soft one should avoid ointments. They rarely suit, and I never use them. Drying powders are far better, and it is interesting to note that in England in the fourteenth century, before they had any experience of true syphilis, soft sores of the penis were directed to be treated with the ashes of burnt linen. They could not have devised a more sensible treatment. Under simple antiseptic treatment soft sores will generally heal rapidly, and undoubtedly for the soft sores and for the doubtful sores iodoform and boric powder—e.g., in the proportion of one to four—can hardly be improved upon. Calomel powder, either diluted or not, and the old-fashioned

black-wash are excellent applications for venereal sores. For soft chancres I believe strongly in cauterisation with pure carbolic acid, with which there is no need to apply cocaine as there is not much pain and it causes the soft sores to heal up rapidly. The treatment is also valuable because in many cases I believe it prevents the occurrence of suppurating bubo. If, and as soon as, your diagnosis is certain that the case is one of primary syphilis, give mercury. There is nothing which will cause the induration to melt away so rapidly as the internal use of mercury. With regard to excision in doubtful cases I could give several instances where excision has proved quite useless, although it has been done within a few days of contagion.

A word, in conclusion, as to the history of the occurrence of primary sores. Be very cautious in accepting patients' statements. They often conceal the fact that they have had primary sores, and, of course, when months or years have elapsed they forget all the characters of them. You will learn to distrust the statements of patients as to the non-occurrence of venereal sores in the dim and distant past. Sometimes you will be told that although the patient had certain sores it was quite impossible that they could have been venereal, because the individual was "above suspicion." If a man ostentatiously parades the statement that he is above suspicion distrust him all the more. You probably know Sir Peter Teazle's opinion of humanity in general; if you do not know it I will not spoil your pleasure in looking it up.

Two Clinical Lectures

ON

THE USE OF MASSAGE IN RECENT FRACTURES AND OTHER COMMON INJURIES.

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LECTURE II.[1]

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GENTLEMEN,—In my previous lecture the expiration of the time at my disposal compelled me to omit any mention of two varieties of fractures of considerable importance from the point of view of the treatment by immediate massage—viz., fracture of the patella and of the olecranon. Until recently, as you know, the classical method of treating these fractures was by long confinement in splints or fixed apparatus (the period in the case of fracture of the patella extending sometimes to as much as a year or even more) with the object of obtaining as firm a union between the fragments as possible. Under such circumstances it cannot be considered remarkable that in many cases the difficulty in obtaining free movement at the knee at the end of the splinting period was extreme and that in some cases, indeed, the pain and distress entailed in the necessary treatment were more than the patients could endure. Those of you who have had no experience of the old treatment will get a good idea of the difficulties connected with obtaining subsequent free movement by reading the account which John Hunter gives of his own case. So great, indeed, was the pain sometimes under these circumstances that a certain number of people who had sustained a fracture of the knee-cap rather than bear the pain entailed in getting free movement preferred to remain with the limb more or less stiff. Speaking generally, the stiffness that follows on a fracture of the patella treated upon the old lines depends largely on the fixation of the upper fragment to the anterior aspect of the femur at the time when attempts at movement are commenced—not, of course, by bony ankylosis, but by adhesions which, forming around the margin of the knee-cap, so tighten the soft parts about it that it is sealed to the surface of the femur. In attempting to get movement in these cases when treated, as I have said, in the olden way, no really good result could be obtained until the adhesions were loosened—a difficult and painful process which was rendered necessary merely because the parts had been confined so long in splints without movement. Moreover, the strain put upon the parts under these circumstances frequently led to a great stretching of the uniting medium. The upper fragment of the patella remained, in fact, at first fixed and before the exercises had resulted in the breaking-down of the adhesions any movement obtained was at the expense of the stretching of the union, the stretching in some cases being very great; but even in such cases so long as the upper fragment ultimately became freely moveable on the femur a fairly good limb resulted in the majority. In the absence of the treatment by suture now so commonly employed the final result is dependent mainly upon two points: (1) the amount of laceration of the lateral expansions about the knee at the time of the injury (the less the lateral expansions are ruptured the more strength is there left in the joint after the fracture); and (2) the amount of mobility finally retained by the upper fragment of the patella. If the fragment does not contract inveterate adhesions and finally becomes freely moveable upon the femur a more or less useful limb follows, the strength of the limb, as a rule, then being in inverse ratio to the length of the uniting medium. If, on the other hand, fixation of this upper fragment occurs, then the interference with the mobility and strength of the joint is so great that the patient is greatly crippled.

The first object, then, in a case of a fracture of the patella, whether wiring has been practised or not, is to prevent by constant manipulation any chance of adhesion of the upper fragment to the femur—a treatment which excludes any form of splint which makes the patella inaccessible. This necessity for securing free mobility of the patella is not confined to cases of fracture, but if a rapid and perfect result is to be obtained it should be used in all cases of inflammation of the knee-joint, traumatic or otherwise, liable to be followed by stiffness. This is a point to which reference will again be made.

As I have already said, this method of treatment makes the use of fixed immoveable apparatus impossible, such, for example, as plaster-of-Paris, silicate of potash, and the like. I may at once state that I have no doubt that the sooner these stiff immoveable appliances become obsolete the better it will be in all cases of damage of joints and in the neighbourhood of joints. The stiffness and pain which so often followed in fracture of the patella when treated upon the old lines were much more frequently due to the treatment than to the injury. The best results which follow fracture of the patella when not subjected to the wiring treatment will be obtained by immediate smooth massage and patellar manipulation, followed in a fortnight or earlier by gentle passive movement of the knee. By such means in the majority of instances a useful limb may be expected in three months, all splints being discarded at the end of the first month. It is remarkable how little, if any, stretching of the union occurs in cases treated in this way *when care is taken from the outset to secure free movement of the patella upon the femur.*

The same observations apply with equal weight in the case of fracture of the olecranon. You will find upon examination that in the majority of cases of fracture of the olecranon treated by long-continued immobility in splints the detached fragment of the olecranon is practically fixed to the humerus. I do not mean that it is always fixed by bony ankylosis, but it is connected to the humerus by such strong adhesions that it is very difficult to move it at all. Further, you will find that the utility of the limb in such cases is in direct proportion to the mobility of the detached fragment upon the humerus—in fact, the utility of the limb depends more upon this factor than upon the apparent strength of the union. When the fragment is fixed it will be found upon commencing to bend the joint that movement is obtained not by the gliding downwards of the upper fragment upon the humerus, as should be the case, but by a stretching of the union, the fragment remaining fixed; and in such cases, although flexion may be obtained to a great degree, and sometimes completely, extension power is almost, if not entirely, wanting. So much is this the case sometimes in exaggerated cases that although the patient may be able to semiflex the arm or, perhaps, to flex it completely, if the limb is raised above the shoulder or by the side of the head

[1] Lecture I. was published in THE LANCET of June 2nd, 1900, p. 1568.

the forearm falls down almost as in a paralysed limb, in consequence of the triceps having lost its power from the fixation of the detached olecranon to the lower end of the humerus. If in the treatment of such a case trouble be taken during its early progress to constantly move the detached portion of the olecranon upon the humerus by a little gentle flexion and by lateral manipulation all adhesion is prevented and the patient probably recovers with a limb which is practically almost as useful as if there had been no fracture at all—the utility of the limb here, as in fracture of the patella, when the union is fibrous, depending as much or, indeed, more upon the freedom of movement of the detached fragment than upon the actual strength of the uniting medium.

The two great cardinal facts to bear in mind in the rational treatment of fracture of the patella and fracture of the olecranon are these: 1. The avoidance under all circumstances of any chance of the upper part of the patella or of the olecranon becoming adherent to the sub-jacent bone. Such adhesion may be prevented by massage and lateral manipulation combined with gentle flexion and extension, during which the detached fragment is made to move as much as possible with the distal portion of the limb—i.e., with the leg or forearm as the case may be—the lateral movement being the most readily managed and resulting in the least disturbance of the parts generally. 2. All manipulation and passive movement should be preceded by smooth rubbing of the muscles. By this treatment you will in the majority of cases provide the patient with a limb which is useful to an extraordinary degree beyond that which follows provided you do not adopt this plan. I am, of course, speaking generally only, because occasionally a case treated on other methods will leave a sound and good limb, but many of the cases so treated are very imperfect both in movement and in power. When the fracture of an olecranon is treated by wiring, screws, or pegs the same cardinal points must be borne in mind. Massage and passive movement cannot be practised too soon nor can the patient be encouraged too soon to use gentle voluntary movement at the elbow-joint.

I may perhaps be allowed a moment's digression here to explain, in order to avoid any misunderstanding, that the remarks which I have just made must not be held to imply that I have any wish to substitute in a general way treatment by massage and manipulation for the operative measures now so commonly employed in fractures of the olecranon and patella. I am second to none in my estimation of the value of these measures; but there must always remain a number of cases which, for reasons which it would be foreign to my present purpose to discuss, are not suitable for operation—some in themselves, some because the patient does not desire operation, and some in consequence of the circumstances in which the practitioner finds himself being not such as to justify his undertaking operative measures. In such cases intelligent massage and manipulation will produce a better result than any other plan and in many instances will restore the limb to a degree of usefulness which cannot even be excelled by operative treatment.

IMMEDIATE MASSAGE AND MANIPULATION IN DISLOCATIONS.

For the better understanding of the remarks which follow it is necessary to insist upon the following elementary points. If a dislocation be complete in the ordinary acceptation of the term the capsule of the joint must, as a matter of course, be torn, the rent in the capsule being of large or of small extent. The obstacles to the reduction of a dislocation depend comparatively little, as a rule, upon the situation or character of the laceration in the capsule; occasionally only do some of the difficulties met with in attempts at reduction lie with this structure. The real difficulty is for the most part due to muscular contraction—a fact which is amply proved by the manner in which most difficult dislocations will often reduce themselves as soon as the patient is fully anæsthetised. The longer a dislocation remains unreduced the more marked does this contraction of the muscles become and the more difficult is it to remove the bone from its abnormal site. Supposing that a dislocation remains unreduced for five, or six, or eight weeks in a case such as that of the shoulder, physiological shortening of the muscles takes place; and in consequence a reduction of the dislocation by ordinary means may become practically impossible. I mention these facts not because I suppose you are unfamiliar with them, but because I wish to emphasise as strongly as possible the importance of muscular contraction and shortening as the principal obstacles to reduction in the vast majority of the dislocations with which we are ordinarily called upon to deal. For practical purposes the capsule and surrounding bony points may be ignored, since if they afford any obstacle to reduction it is generally secondary to the condition of the muscles. It is further a most important point to bear in mind that under ordinary circumstances after the reduction of a dislocation the retention of the replaced bone in its normal site depends not so much upon the state of the capsule, which in reality has little to do with the matter, as upon the muscles, aided in certain cases by atmospheric pressure. In fact, the question of the healing of the rent in the capsule is of small importance compared with that affecting muscle-waste. The capsule will heal equally well whether the joint be kept fixed in splints or whether it be subjected to passive movement from the first. The muscles about the joint, especially those supplied by the same nerves, waste rapidly if the joint be kept fixed for ever so short a time and if the fixation be persisted in for long periods this wasting may proceed so far as to be incurable. On the other hand, if massage and passive movement be at once commenced then wasting can be entirely prevented. If the muscles are allowed to waste to any great extent, as you can easily see for yourselves by watching an ordinary case, the whole joint becomes loose and flabby. There is no such thing as a primary tonic condition of the capsule of the joint; the capsule of the joint is a passive structure and has no contractile vitality of any sort beyond that which it derives from muscular attachments and expansions. Hence prolonged fixation of a joint after the reduction of a dislocation allows the muscles to waste, which is tantamount to bringing about the precise conditions leading to recurrent dislocation if attempts to obtain free movement are made. The effect of even temporary fixation of a joint in the production of adhesions which have subsequently to be treated, often for long periods, I need hardly, I suppose, impress upon you—although I fancy that if you were to examine a large number of patients who have had dislocations, say of the shoulder-joint, at a long period after the injury, you would perhaps be surprised to find that the percentage of cases in which some stiffness still persists from this cause is considerable. In the practice of the older school of surgeons prolonged fixation of a joint after dislocation was almost universal, the main object being to allow of a firm and rapid union of the rent in the capsule. So much was thought of the value of the healed capsule in retaining the parts in position that the disadvantages of adhesions and muscle-waste were held to be of no account compared with the vital importance of the completely restored capsule. I strongly recommend you to reverse these conditions by concentrating your attention upon measures for the avoidance of adhesions and muscle-waste. Ignore the torn capsule; the rent will heal soundly in spite of any manipulations or movement it may be subjected to in treatment. Ingenious operations which from the nature of things cannot effect material good have been from time to time invented with a view to the cure of recurrent dislocation by shortening the loose capsules—the fact having been overlooked or forgotten that looseness of the capsule is secondary to muscle-waste, which is the real thing to be combated. The only available method by which muscle-waste can be avoided in these cases of dislocation, especially of the shoulder, is by massage, commencing immediately after the reduction of the displacement—smooth rubbing only for the first two days, after which passive movement follows the massage. *This passive movement may be very free in all directions save that which is in the direction of the muscles which tend to waste. For example, in the case of the shoulder, abduction of the arm from the trunk should not be practised for a week or 10 days after the injury, because the strong action of the adductors, unopposed for the time being by the weakened deltoid, tends to displace the head of the humerus inwards.* For the same reason in the first week no *voluntary* movements should be allowed, all movements being *passive*. Treated on these lines any dislocation of a major joint—e.g., shoulder or hip—may be cured in from two to three weeks without adhesions and with no stiffness remaining. All cases of recurrent dislocation will be found to be associated with marked muscle-waste. The cardinal principle in their treatment is in the direction of rectifying the atrophy of the muscles by massage and methodical exercises with or without electricity, and not in the direction of shortening the lax capsule by operation.

The beneficial effect of massage in dislocations is not limited to the treatment after reduction; it is sometimes of great use as an aid to reduction. The following case will serve as an illustration of this point. A highly sensitive and nervous lady, considerably beyond middle age, dislocated her shoulder in a fall which followed a slip on some parquet flooring. There was extreme pain and the muscular spasm was intense, the least attempt to move the parts eliciting loud cries of pain from the patient. Whilst waiting for the arrival of an anæsthetist, as the muscular spasm was so great, I gently massaged the region of the shoulder, upon which the pain seemed soon to be modified and by degrees disappeared. In the course of the rubbing I noticed that the muscles became less hard, and especially I observed that the *hollow tension* of the deltoid was succeeded by a feeling of softness. Seizing the favourable moment I passed my right hand into the axilla and with a sudden outward jerk reduced the dislocation easily (the displacement was sub-glenoid); in fact, had an anæsthetic been administered reduction could not have been more easily effected. In two other cases of dislocation of the shoulder of a similar kind, one being subcoracoid, the other sub-glenoid, I have in the same way effected reduction with remarkable ease. Cases like these show further the point I have already insisted upon—viz., the importance of concentrating your mind upon the condition of the muscles in cases of dislocation.

Before leaving the subject of dislocations allow me again to refer to the question of muscle-waste in these cases because I do not think in some instances it is sufficiently understood. In the case of the fleshy joints—e.g., the shoulder and hip—muscle-waste, unless the massage treatment is adopted, is too obvious to require comment. Wasting in the same manner occurs uniformly in all dislocations, although I hardly think that this is recognised by some people. The wasting, for instance, of the quadriceps in certain conditions of the knee is of common knowledge, but I venture to think that the wasting of the muscles controlling the ilio-tibial band is but little realised. Again, it would at first sight seem almost impossible that any wasting of muscles should follow upon dislocations of distal joints like the phalanges of the finger which are quite remote from muscular bellies, yet in these it will be found if examination be made that there is universally some wasting of the forearm, and further that the permanent sense of weakening which is complained of by some of the patients who have suffered from these injuries can only be rectified by voluntary exercises or by thorough massage of the forearm muscles. The bearing of these points upon the scientific treatment of these injuries is too obvious to require explanation, but it is, I am sure, of much more importance than is commonly thought. It would, of course, be interesting to describe *seriatim* and in detail the management of the various dislocations throughout the body by immediate massage and passive movement, but time will hardly allow of this. I hope, however, that what I have been able to say will be sufficient to indicate the general principles upon which the treatment should be conducted. Its modification to the requirements of the different joints is merely a matter for the exercise of ordinary intelligence.

IMMEDIATE MASSAGE IN SPRAINS, WRENCHES, AND BRUISES.

As in the case with dislocation, as I have endeavoured to explain, the objects to be attained in the treatment of sprains, wrenches, and bruises are the restoration to the normal state by the rapid removal of effused products, the prevention of adhesions, and the avoidance of muscle-waste. Any treatment which fails to obtain these ends is defective. Further, it is, I am sure, undeniable that the only plan of treatment which will attain the desired end with certainty and in a reasonable time is that by immediate massage and very early passive movement—a plan which is, if intelligently used, applicable universally, with the exception, perhaps, of a few special cases.

First, with regard to sprains. For our present purpose by a sprain is meant an injury to a joint, a muscle, or other soft parts by a wrench, a bend, or a twist. There is always some laceration of the tissues but there is no open wound. In the case of a joint the injury always involves some tearing of the fibres of the capsule, synovial apparatus, or cartilage. There is pain of variable degrees and there may or may not be effusion into the joint. Generally, if the sprain is of any severity there is effusion into the joint, if the effusion follows immediately upon the injury it is blood, if it follows a day or two subsequently it is due to synovitis. I must again crave your indulgence for emphasising such elementary points. The occurrence of this laceration in cases of sprain—which means, of course, a subcutaneous wound—led to the faulty practice of former times, which is even now, I fear, far too prevalent, of placing parts so injured for a long period in splints. This is the best possible method for facilitating the formation of adhesions and the perpetuation of muscle-waste, the main object of this mistaken treatment being to allow of the rapid healing of the wounded tissues—a point of comparatively small importance.

In order to make clear the plan of treatment which I use and which I strongly advise you to adopt in these injuries let us take the case of a man who has sprained his knee. At the time of his coming under observation—say a few hours after the injury—the joint is painful, swollen from effusion (probably for the most part blood), and any attempt at movement of the joint is resisted. The first indication is the removal of the effusion. With this object the patient is, if possible, sent to bed and the limb is placed upon a light back-splint—a ham-splint being the most convenient—applied so that free access is left to the joint. Gentle smooth massage over the swollen joint is commenced at once. (In very severe cases this is sometimes resented at first by the patient, whose resentment, however, soon subsides when he realises the soothing effect which the gentle rubbing produces.) In the intervals of the rubbing fomentations of lead and opium may be laid upon the joint; the opium soothes somewhat and the lead hardens the skin a little, which is useful in the subsequent management. From the first gentle passive movement of the patella is used, for the reasons which I have already sufficiently indicated. As soon as the effusion has distinctly commenced to subside, as is shown by the decrease in the tension of the joint, gentle passive movement (flexion and extension) is commenced, and if upon the commencement of the passive movement no increase of effusion occurs the splint is put aside altogether. When the patient comes under treatment immediately after the injury the splint can generally be dispensed with on the third day. With the discarding of the splint gentle massage of the thigh and leg is added to the rubbing of the joint itself, the passive movement and the massage becoming more and more thorough as the effusion subsides. A compress of the kind mentioned may be used in the intervals if it is comfortable to the patient. Treated in this simple way there are few cases of severe sprain of the knee in which the patient may not be getting about comfortably in a fortnight, at the end of which time another fortnight of methodical exercises, either in a gymnasium or by means of a "home" exerciser, will generally complete the cure. I have taken as an example a severe case requiring confinement to bed. The treatment of the milder forms is modified to the necessities of the case, the great points to be borne in mind being the necessity for avoidance of the use of splints after the effusion has commenced to subside, the immediate use of massage to the joint, and early passive movement. In all cases the early movements should be passive—the habit of sending the milder forms of sprains at once to the gymnasium is to be avoided. In no case of sprain should a cure be considered to have been obtained if any sign of wasting of muscle beyond that which comes from mere disuse remains. The longer the time which intervenes between the receipt of the injury and the commencement of the rational treatment the greater is the difficulty in rectifying the muscle-waste with its necessarily concurrent weakness, and in cases in which the parts have been long confined in splints a cure in the true sense is sometimes impossible.

The following points in the carrying out of passive movement in cases of sprain are of some moment. The first movements used should be those of the simplest kind; for example, flexion and extension in the hip or knee, antero-posterior movement in the shoulder, abduction and adduction should then follow, and finally rotation and circumduction in joints permitting of that movement. This sequence, however, is always interrupted for the following reason which is of paramount importance—*the last movement to be practised should be that which, so far as can be ascertained, was concerned in the production of the injury.* Let me make myself clear. Suppose for a moment that a severe sprain of the shoulder has been caused by a fall on the hand or elbow, the arm having been at the time widely abducted from the side—the damage will be probably about the inner aspect of the capsule or under the acromion.

n such a case passive abduction should be the last movement practised, as it would be the movement most likely to irritate the part immediately lacerated or bruised. Although it should be the last movement to be commenced it should not, however, be long deferred, seven days being probably the limit of time which can with safety be spared before its commencement. Again, in the sprain occurring in internal derangement of the knee-joint the injury is almost always caused by either internal or external rotation. In such a case, therefore, the last movement to be practised is rotation. Indeed, it is, speaking generally, better to avoid rotation altogether in that particular class of case.[2]

In sprains complicated by external wound it is clear that the plan which I have been advocating cannot immediately be adopted in its entirety, nor can massage be comfortably practised immediately over the damaged part when the skin is abraded or raw; but in such circumstances massage of neighbouring muscles and passive movement should always be practised, the peculiarities of each case dictating the modifications which are necessary in the application of the treatment.

I had intended giving some details of the treatment of simple bruises by this same plan of massage and movement, but the allotted time has been more than spent. All, therefore, that I can say is that in these cases the method of its application and the objects are the same as those already mentioned—viz., the rapid removal of effusion and the prevention of matting of the injured parts.

In conclusion, allow me to say that I have no desire that the treatment which I have been now advocating should be used to the exclusion of all others. My main object is to urge upon you the desirability of shaking off to some extent the incubus of the traditional routine treatment of fractures and the other kinds of injury of which I have been speaking by prolonged splinting, strappings, counter-irritants, &c., and, unless unavoidable circumstances prevent, to substitute a line of treatment which is, I am sure, rational and will in the end be found, by anyone who will take the trouble to acquire a personal experience of it, to produce results far superior to those obtainable by other plans.

THE PRIMARY DISORDERS OF GROWTH.

BY HASTINGS GILFORD, F.R.C.S. ENG.

THERE is a widespread belief that, apart from its antiquarian interest, medical history is of no practical use. Is not this largely because we do not apply the lessons which that history teaches to the circumstances of the present day? Neglect of the teaching of the past causes us to go astray in two opposite directions. On the one hand we are prone to treat the beliefs of our forefathers with more or less of contempt, while on the other hand we attach so much importance to them that we regard it as sacrilege to question their truth. Nothing, for example, can exceed our disdain of the practice which was in vogue during the early part of the century, yet much of our own practice is founded upon a groundwork which was laid down at the same period, and we are no more inclined to question its stability than we are to doubt the permanence of some stately cathedral.

Now, both these attitudes of mind are undoubtedly wrong. Both are due to a misapprehension of the principles which underlie all history. Perhaps the best corrective to that irreverence of mind which despises all that our forbears esteemed is the thought that this same history tells us beyond all denial that just as we look back upon the medical practitioners and the methods of 100 years ago so will our descendants of a century hence regard us and our methods. We are far too prone to view our work with a satisfaction and complacency which should go only with final achievement. We cannot realise that we are still running our race and are not even within sight of the goal.

We also have to lay it to heart that history teaches quite as emphatically that old-established theories must be constantly tested in the light of more recent days. They are good maxims which assert that we should accept nothing which is based solely upon authority and which bid us to be sceptical even of that of which we are most sure. The fact is, that we of the present day suffer from our very nearness to the work of our time—we have not the immense advantage of being able to look upon its facts and circumstances from a distance. Our ideas suffer from a want of perspective, and we are therefore apt to attach far too much importance to certain particulars and far too little to others. There is no better example of this form of distortion and of its possible consequences than the absorbing attention which is now being given to the causes and pathology of one class of diseases and the almost equal neglect which is meted out to others. Much good work has been done of late in the investigation of the influence of certain fungi in the production of disease, but there are indications that we are already losing all sense of proportion and are attaching too much importance to these fungi in their relation to etiology and pathology, and that we think far too highly of the effect of their destruction in the eradication of disease. There was at one time a sanguine hope that a method had at last been found whereby the bacillus of phthisis could be killed in the body without the destruction of its host. It was thought that the discovery had actually been made and that it was "the greatest medical discovery of the century"; but we have every reason to be thankful that these expectations were disappointed, for it is difficult to conceive of anything that would have been more disastrous to human health and happiness. Nothing is more certain than that these fungi, bad as they may seem in the individual, are salutary, and that, on the larger stage of human affairs, they play their allotted part wisely and well. They are as essential to our welfare as are decay and death, wherever they are found. Now, in these days the direct treatment of the fungus of phthisis is no longer the chief object of the physician, but it plays a secondary part, subordinate to the far more important clinical measures of fresh air, sunshine, regulated exercise, and food. There can be no doubt that could some method be found of safely and directly killing the fungus of phthisis, or of cholera, plague, or other disease, we should be inclined to rest content while the conditions which favour its growth would go on unheeded. We should in each case cast out one devil and leave a state of affairs which would favour the entrance of seven other devils far worse than the first. Yet there is still the same eager pursuit of the germs of disease and the same elusive hope that we shall gain by their destruction. It would be absurd to deny that good arises from this pursuit, but, unfortunately, there is evil as well; and not the least is the comparative neglect of the study of other diseases and their origins, some of which are more important and more worthy of investigation. Hence it has come to pass that while on the one hand we are rapidly gaining acquaintance with the appearance and habits of the parasites of phthisis, enteric fever, cholera, the plague, and other bacterial diseases, we know almost nothing of the factors which are responsible for the appearance of a large number of other disorders. Some of these, such as myxœdema, osteitis deformans, and acromegaly, have not long been brought to light, while others, and among them cirrhosis of the liver, ichthyosis, and primary Bright's disease, are comparatively old. With few exceptions they are regarded as diseases which have been well discussed by great authorities who are still living or are but recently dead, and it is commonly supposed that there is not much more to be learned about them. But it is contended that our knowledge of these diseases is by no means exhausted; moreover it is believed that their study will throw light on the causes and nature of innocent tumours and cancers and on the conditions which underlie the appearance of some of the bacterial diseases. In fact, there is reason to believe that their relation to some of the bacterial diseases is as that of the horse to the cart, and that they ought, therefore, to take a corresponding place in order of investigation. The most important of the diseases referred to are as follows, viz.: the different forms of leukæmia and primary anæmia; the muscular dystrophies; the scleroses of the brain and spinal cord; cirrhosis and acute atrophy of the liver, and primary Bright's disease; idiopathic obesity and emaciation; myxœdema and Graves's disease; Addison's disease, acromegaly, and gigantism; scleroderma and ichthyosis; and osteitis deformans and osteomalacia.

It is true that theories are not wanting to account for the appearance of these diseases, but as a rule they are indications rather of the existence of a natural horror of an

[2] For details of the author's treatment of these cases see THE LANCET, Jan. 5th, 1900, p. 6.

etiological vacuum than of a serious attempt to deal with the question which they are supposed to settle. This may be said, for example, of three of the most popular of these hypotheses—namely, the inflammatory, the bacterial, and the nervous. In nearly all cases one or other of these theories is torn out of its proper setting and forced to do duty in a way which is foreign to its nature. Each when applied to any one of these disorders is as a round cork to a square hole: it may be made to go in but will not fit.

Now it is the object of this paper to show that all the diseases in question belong in reality to the same type or group. At first this appears to be quite impossible, seeing that they differ so widely that they do not seem to have anything in common; but on subjecting them to that form of inquiry which has for its object the sifting of principles from details, it will be found that these differences, great as they may appear, are not in reality such as separate classes or orders, but only genera or species. They are in all cases due to differences of form, use, or age of the organ affected, and to these alone. They are secondary or accidental, and not primary or essential. If we put these accidental differences on one side and keep in view only those which are essential it will be found that the diseases in question resemble each other and differ from all other diseases in the following particulars.

A. Forms.—The form which is assumed is invariably one of four kinds, the differences between them establishing the genera. The organ affected shows either: (*a*) hypertrophy (enlargement with increase of function), as of the thyroid gland in Graves's disease and of the bones in gigantism; (*b*) degenerative hyperplasia (enlargement with destruction of function), as of the thyroid gland in goitre, the bones in osteitis deformans, the blood in leukæmia, and the lymphatic glands in Hodgkin's disease; (*c*) hypoplasia (simple defect of growth), as of the brain in microcephalism and of the kidney in congenital "atrophy" of that organ; (*d*) degenerative hypoplasia (degeneration and wasting), as of the anterior horn of grey matter of the spinal cord in progressive muscular atrophy and of the liver in acute atrophy of that organ.

These forms may be still further reduced to two. In one (hypertrophy and hypoplasia) the constituent elements remain unaffected in proportion and quality though the organ itself may be either larger or smaller; in the other (degenerative hyperplasia and degenerative hypoplasia) together with alteration in size of the organ involved the constituent cells are degenerated, and running with this degeneration is more or less increase of tissue of low type. Some of the conditions included in the first of these two are on the boundary line between health and disease, as in hypertrophy of bone (gigantism), muscular hypertrophy, and obesity. While on the one hand they merge into conditions of health, on the other hand they shade off into the next group and show an especial tendency to degenerative changes. The following group characters must therefore be understood to apply more particularly to those diseases which are distinguished by degenerative atrophy or excess, though all diseases share in them more or less.

B. Functional characters.—1. All the diseases under consideration are *sporadic*, though some may be also endemic. Among the chief of these latter are goitre and osteomalacia. Others show the same tendency in a minor degree, as, e.g., osteitis deformans and pernicious anæmia.

2. All are *idiopathic* in origin, using the word in its widest sense as signifying, not that they have no cause (which would be absurd) but that their causes are not recognised or are unknown. This is true of every one of them, for though many diseases undoubtedly owe their appearance to certain more or less well-defined causes yet in no case can it be said that these causes account for all cases of the disease. Moreover, in those instances in which these proximate causes are so obvious as to admit of no question, they must still be regarded as idiopathic, since there is always some remote but necessary cause at work, of the nature of which we have to express our ignorance. Thus we well know that cirrhosis of the liver is produced by the action of alcohol; yet it is quite as certain that behind this there is an ultimate cause with the nature of which we are unacquainted and which is still more important than alcohol, for it is only in this way that we can account for the fact that hard drinking will produce the disease in one drinker and not in another, or that cirrhosis may occur in a teetotaler and not in a drunkard. On the other hand, no disease is truly idiopathic, in whatever sense the word is used, for not only must each have some primary cause, but, as a rule, some secondary influence can also be traced in its production. Thus, pernicious or idiopathic anæmia, notwithstanding its name, is undoubtedly sometimes partly caused by influences which have an exhausting effect upon the body at large and upon the blood in particular. Depressing mental emotion, excessive bleeding, insufficient food, and frequent child-bearing may each be regarded as a cause of pernicious anæmia. In most of these diseases a multiplicity of secondary causes, differing more or less in kind, can be traced, and this fact by itself at once shows that there is some one unknown, but essential, cause at work, for only on this ground can it be explained why different actions should produce the same effects.

3. All are *progressive* in their course, though this course is, in most cases, liable to interruptions. Periods sometimes occur during which the progress of the disease is arrested or positive improvement takes place. This is especially the case with pernicious anæmia, osteomalacia, lymphadenoma, the leukæmias, cirrhosis of the liver, granular kidney, Graves's disease, and disseminated sclerosis and other scleroses of the spinal cord, but it is also noticeable in other diseases of the group. These periods of abatement or arrest are irregular in their appearance and are more marked in some cases than in others.

4. All are *pernicious* in their results—i.e., when well established their course terminates only with the destruction of the part affected or in death. Exceptions to this rule are met with in some of those affections which are most exposed to external influences, such as scleroderma and ichthyosis, and, in a less degree, in other diseases. It is probable that in no case is the disease absolutely hopeless, though in most we are justified in pronouncing it to be so.

5. No remedy has been found of any certain effect in any one of them with the exception of the skin diseases. They are *incurable* by drugs. A modified exception must, however, be made in favour of three or four drugs, one of which is arsenic, which has been found to do good in pernicious anæmia, in the allied anæmias and leukæmias, and in some other diseases. Another is extract of the thyroid gland, which is of use in reducing obesity, goitre, and some other enlargements. Iodide of potassium and some of the salts of mercury may also have an influence in the direction of cure.

The diseases of the group have also certain other features in common.

6. They show peculiar liability to attacks of inflammation. This is most evident in the various forms of leukæmia and in fibrous degeneration of the liver, kidneys, lungs, prostate, and ovaries.

7. There is also close affinity between many of these diseases and the infective granulomata. This is especially shown in fibrous degeneration of the lungs, in lymphadenoma, and in local gigantism of the hands or feet. So close is this relation in certain cellular diseases of the adrenal and pituitary bodies that it may be almost impossible to say in a given case whether we have to do with a degenerative hyperplasia or with one form of granulomata or another. Sometimes, moreover, syphilis or tubercle may pass by almost imperceptible steps into hyperplasia or atrophy, as when it produces fibrosis of the lungs or liver, or when syphilis in its congenital or tertiary form affects the nervous system. It is probable that every one of the diseases of this group may be either produced or successfully imitated by syphilis alone.

8. They are all closely related to the innocent tumours and to the cancers. This is shown in the following ways—viz., (*a*) By their occasional occurrence together in different parts of the same body, as when fibrous or fatty tumours are found on the trunk of a patient affected with local giant growth of the extremities, or when myeloma occurs with Hodgkin's disease or with goitre,[1] or sarcoma of the stomach with osteitis deformans. Cancer of the breast, the rectum, or other part sometimes also occurs in patients affected with fibrous or cystic disease of the ovaries, or tumours of the suprarenal capsules (two cases) with sexual precocity.[2] I have seen the conjunction of idiopathic obesity with a cartilaginous outgrowth and with a third mark of degeneration—viz., diabetes. Instances are also reported of the association of splenic leukæmia[3] and of Hodgkin's disease[4]

[1] St. Bartholomew's Hospital Museum, 463*a*.

[2] Sir J. Burdon Sanderson: Transactions of the Pathological Society of London, vol. xx., p. 384; THE LANCET, Feb. 7th, 1885, p. 252.

[3] Archives de Médecine Expérimentale, March, 1895.

[4] Transactions of the Pathological Society of London, vol. xxix., p. 313.

respectively with carcinoma. Israel and Leyden[5] give details of a case which they believe to be one of mixed splenic anæmia, pernicious anæmia, and multiple sarcomata, but this opinion cannot be considered conclusive, for no microscopical examination of the blood appears to have been made during life. They refer to some cases reported by Grawitz in which sarcoma seems to have occurred with pernicious anæmia, and similar cases by Ehrlich and Litten are also mentioned. None of these cases, however, is of recent date. (*b*) More often the relation is indicated by the direct origin of tumours from parts affected with these diseases, as when fibrous or fatty tumours spring from giant extremities, tumours of bone, cartilage, marrow or sarcoma tissue from affections of bone (osteomalacia or osteitis deformans), carcinomata or sarcomata from cirrhosed livers, from cystic ovaries or breasts, or from goitres, and when fibro-myomata spring from enlarged prostates. (*c*) Innocent tumours and cancers also show a resemblance in having no known origin and in being pernicious and progressive, but irregular in rate of growth, incurable, and resistant to medicinal treatment.

9. There also appears to be some connexion between these diseases and congenital excesses and defects. This is shown (*a*) by the occurrence of a congenital malformation and one of these diseases in the same individual. As a rule the two occur together in the same organ or organs, as when macrodactyly affects a hand with webbed fingers (two cases)[6] or when misplaced or malformed kidneys, breasts, or testicles become the seat of fibrous or cystic disease. Dr. Hale White[7] gives a good instance of this combination of malformation with fibrous metaplasia. The patient was a child, aged nine years, each of whose kidneys was cut into by a band of fibrous tissue in such a way as to constrict off one-third of its substance. The smaller portion of each kidney, so constricted, was affected with cirrhosis. There was also an associated "hypertrophic" cirrhosis of the liver which was not due to alcohol. In another case we find cirrhosis of the liver occurring in an organ in which the left lobe was rudimentary.[8] The left kidney and suprarenal capsule were absent. Instances are also not very uncommon in which one organ is misplaced or malformed while the other is fibrous or cystic. At other times the malformation and degenerative disease occur in different organs, of which two instances have just been given and many others are reported. Thus Dr. Carrington[9] writes of a case of pernicious anæmia in which there were also various congenital deformities of the genito-urinary organs of the left side. Such cases as that of the association of malformation of an eye with hypertrophy of the sexual organs, of amyelus or atrophy of the thyroid gland with ichthyosis, of congenital heart disease with congenital splenic leukæmia,[10] or of retinitis pigmentosa with lymphadenoma,[11] are by no means uncommon. Sometimes the association occurs so often that it has become an item of ordinary information, as when polydactylism occurs with a particular form of idiopathic obesity, deaf-mutism with goitre, or cleft palate with cretinism. (*b*) At other times they are associated in different members of the same family. Of this, too, there are many instances, though it cannot be said whether they are sufficiently numerous to establish a connexion between them from this association alone. (*c*) Like congenital malformations, also, they show hereditary tendencies or occur as family diseases. This heredity may be direct or indirect. There is good evidence that *direct* and family heredity is sometimes shown by splenic leukæmia, osteomalacia, granular disease of the kidneys, goitre, Graves's disease, scleroderma, ichthyosis, and various fibrous degenerations of the muscular and nervous systems. There is also reason to believe that osteitis deformans, Addison's disease, lymphadenoma, and cirrhosis of the liver may be transmitted in the same way. *Indirect* heredity is that form of heredity which is manifested by the occurrence of one or more diseases of the group in a family of which other members are affected with some disorder which is recognised to be hereditary. Thus there are many instances on record of one or more members of a family being the subject of diabetes, hare-lip, goitre, polydactylism, or other stigma of a transmissible nature, while others are affected with some disease of the group now being referred to. This association when it takes place is nearly always alluded to incidentally. Probably many other cases occur in which it is not thought worth while even to make mention of it, the connexion between the different diseases being thought to be too remote. (*d*) They also behave like congenital malformations in showing a tendency to occur together in the same individual. Moreover, like them, they as a rule affect those parts which are related physiologically or by continuity of tissue. Thus hyperplasia commencing in one hand or foot is prone to extend to the rest of the limb or to the other hand or foot. In granular disease of the kidney both organs, as a rule, are involved, though one may be much worse than the other, and it is rare not to find other parts of the cardio-vascular system affected as well, while cirrhosis of the liver is a frequent concomitant. Hyperplasia of the lymphatic glands, in the same way, soon leads to degenerative changes in the blood or spleen. In the same way, also, hypoplasia or hyperplasia of deep layers of the skin sometimes leads to corresponding defect or excess of the underlying connective tissues, or even of the bones, as in facial hemi-atrophy and hemi-hypertrophy. There is also reason to believe that degenerative hyperplasia of the bone marrow and bone (osteomalacia and osteitis deformans) may occur together. Many other instances occur. Thus splenic leukæmia may be associated with chronic Bright's disease,[12] splenic anæmia with cirrhosis of the liver,[13] and primary uncomplicated splenomegaly with cirrhosis of the liver.[14] (*e*) Or they may occur in different members of the same family. Thus among the many cases which are reported in different journals we find one in which one member of a family had muscular dystrophy, another cirrhosis of the liver, while yet another died from granular disease of the kidneys. In another case one had cirrhosis of the liver and another disseminated sclerosis. Sänger,[15] in describing a case of congenital splenic leukæmia, mentions that the mother was affected at the time of the child's birth with chronic Bright's disease. I myself was recently present at the post-mortem examination of a child (a patient of Dr. Francis Hawkins) who had died from cirrhosis of the liver and in whom the spleen was found to be large and in a more advanced stage of fibrosis than the liver. A brother of this patient was suffering at the time from muscular dystrophy. No cause could be found for these diseases. Many other similar cases might be mentioned, but perhaps the most striking is one which is incidentally referred to by Professor Clifford Allbutt,[16] who says that he was "once called in consultation to a father and three children, whose maladies were as follows: carcinoma, lymphadenoma, pernicious anæmia, and pseudo-hypertrophic palsy." All these are examples of heredity showing itself in an indirect manner. They furnish evidence as to the unity of the different diseases. Other instances will be referred to presently.

SIGNIFICANCE OF ASSOCIATION.

The association of these diseases in the same family or the same individual has hitherto been held to be due either to mere coincidence or to the one disease being the direct outcome of the other. The latter view may, however, in most cases be at once dismissed, seeing that it is usually founded on the fact of association alone and has no other basis. In regard to the former view it is obvious that it cannot be entertained if in the case of any given disease it can be shown that those affected with it are far more subject to either of these diseases than are the population in general. Due allowance in such cases must, of course, be made for the action of some common exciting cause—such as alcohol or syphilis. As a matter of fact it is widely recognised that after making such deduction certain of these diseases occur in association much more frequently than can be explained on the score of mere chance. Under these circumstances the aid of a "diathesis" has been called in and an individual affected with degenerative hyperplasia of two or more organs, such as the lungs, the liver, and the spinal cord, or the kidneys, is said to be suffering from the effects of a "fibroid diathesis." In other words, it is recognised that behind these associated diseases there is some dyscrasia which predisposes the tissues to mixed overgrowth and degeneration.

[5] Berliner Klinische Wochenschrift, 1890, p. 231.
[6] Bulletin de la Société de Chirurgie, December, 1880; Guy's Hospital Gazette, July 30th, 1898, p. 336.
[7] Transactions of the Pathological Society of London, vol. xxvi., p. 262.
[8] Brit. Med. Jour., vol. i., 1883, p. 115.
[9] Transactions of the Pathological Society of London, vol. xxxv., p. 237.
[10] Münchener Medicinische Wochenschrift, 1898, vol. xlv.
[11] Brit. Med. Jour., vol. ii., 1896, p. 1781.
[12] Von Jaksch: Clinical Diagnosis, translated by Dr. Cagney, p. 20.
[13] Virchow's Archiv (Oestreich), Band cxlii., p. 285.
[14] L'Union Médicale, 1892, No. 90, p. 177.
[15] Archiv für Gynäkologie, Band xxxiii., H. 2, p. 196.
[16] Brit. Med. Jour., vol. ii., 1888, p. 287.

This is, in fact, identical with the view which is now being put forward. Here, however, it is widened in scope so as to embrace degenerative overgrowths of all organs and tissues. It includes not only morbid excesses of growth, but defects, especially where they are combined with degeneration, and these excesses and defects may date from all periods, either before or after birth.

But although it is recognised that there is some common factor underlying the appearance in the same person of such prevalent diseases as cirrhosis of the liver and granular kidneys, the same cannot be said of the rarer of the diseases under consideration. Yet the statistics of some of the less common of these diseases seem to tell the same tale. Thus, in writing of splenic leukæmia Sir William Gowers [17] says that among 111 cases the state of the kidneys was referred to in 62, and that in six of these they were affected with Bright's disease; while among 109 cases of leukæmia there were three instances of cirrhosis of the liver. Now the percentage of liver and kidney diseases here is far higher than it is among the healthy, yet it is quite possible that there was some common exciting cause, such as alcohol or syphilis, which accounted for the association, though Sir William Gowers himself says that it was accidental. The same explanation may also be given of the conjunction in the same person of Addison's disease and cirrhosis of the liver (Dr. Leva [18] and also Dr. Carrington [19]), of Addison's disease and chronic Bright's disease (Dr. Thompson [20]), or of pernicious anæmia and goitre.[21] But it is evident that the more these instances multiply and the rarer the diseases themselves are, the less likely it is that their conjunction is due to mere chance. Thus in a case of Addison's disease in a man, aged 36 years, which was carefully examined by Dr. Bergtold,[22] it was found after death that there was not only the usual lesion of the suprarenal capsules, but that there was also slight emphysema of the lungs, cirrhosis of the liver, fibrosis of the spleen, chronic Bright's disease of the kidneys, and obliterating degeneration of the arteries. The diseased capsules were examined for tubercle bacilli, but none was found. Now, it is true that this man "had been in the habit of drinking a great deal of beer," but nevertheless the bare fact of the occurrence of such a number of degenerative diseases in one man goes a long way towards proving their family connexion and dependence upon some remoter origin than beer. Perhaps even more may be said of the association of two such rare diseases as Hodgkin's disease and osteomalacia (Dr. Goodhart [23]) or of Graves's disease and osteomalacia.[24] Equally significant is the occurrence among different members of the same family of Addison's disease and Graves's disease (Dr. Hale White [25]), and it would be contrary to all the rules of evidence to believe it possible that the before-mentioned instance of the occurrence of carcinoma, muscular pseudo-hypertrophy, pernicious anæmia, and lymphadenoma in a father and his three children respectively (Professor Clifford Allbutt) should have no other explanation than that of fate. Finally, some diseases are associated so often that there seems to be no possible escape from the inference that there is some common but remote factor which connects one with the other. This may be said, for example, of the conjunction of cirrhosis or atrophy of the stomach and intestines with pernicious anæmia, of fibrous degenerations of the spinal cord with pernicious anæmia, of similar degenerations of the brain and spinal cord with osteomalacia, and perhaps Dr. R. Saundby's [26] cases of hereditary enlargement of the spleen with atrophy of the suprarenal capsules. In each of the first three of these instances the usual explanation is that the association is due either to the one disease being the direct cause of the other, or to both being the result of the same poison acting in different ways on different parts. The view which is held here is that they are related to one another as cleft palate is related to club-foot, that they are the expression of some intrinsic and unexplained anomaly of growth or malformation, and that, like all other malformations, they tend to occur in different parts of the same body and in different members of the same family.

Beyond what has already been said, evidence as to the class unity of these diseases and as to their nature is furnished by the occurrence of certain links which connect two or more of them together. Thus diabetes, which is one of these links, is found in association with cirrhosis of the liver, idiopathic obesity, splenic leukæmia, pernicious anæmia (Osler), osteomalacia, acromegaly, Graves's disease, general paralysis, and tabes dorsalis. Goitre is another such link, and scleroderma another. These and chronic Bright's disease, or "dropsy," or "liver disease," are not infrequently found as comcomitants or as family complaints in the clinical reports of the rarer diseases.

Some of the associations which have been mentioned are by no means convincing and are doubtless capable of explanation on other grounds than that of a common origin of the associated diseases in a depravity of growth. But it must be insisted upon that the subject is not like a chain whose strength resides in its weakest link. It is like a collection of sticks, some of which may be mere twigs and easily snapped when they are taken separately, but when bound up together they form a bundle which cannot so readily be broken. It must be recognised that that the subject is one which is strengthened by everything that supports it, however weak it may be. Taken as a whole, in this way the facts are consistent with the view that the diseases which have been mentioned owe their origin to the same ultimate cause acting in the same way upon different tissues. They form a group which is closely connected with that of the granulomata and the tumours, and which differs in no essential particular from that which is formed by congenital malformations, but differs in every important respect from all other groups.

RELATION TO OTHER DISEASES.

Mixed forms.—This group of primary growth diseases comes in contact with other groups in many directions. Thus it is mixed more or less with other groups in rheumatoid arthritis, in the infective granulomata, and in inflammation. Hereditary and tertiary syphilis in particular sometimes give rise to such overgrowth and degeneration as may be indistinguishable from that which is idiopathic. This is the case, e.g., in some instances of locomotor ataxia, of general paralysis, and of leucoplakia of the tongue.

Relation to inflammation.—Inflammation runs by such imperceptible degrees into degenerative hyperplasia that instances occur of which it is almost impossible to say whether they are more inflammatory or more hyperplastic. This is well shown in a case which I once reported,[27] in which these two processes also merged into that of new growth. In this case a concretion in a vermiform appendix gave rise first to inflammation with the formation of pus and then to a large hyperplastic swelling which finally ended in sarcoma. As a rule, however, inflammation, when it arises in the course of lymphadenoma, splenic enlargement, cirrhosis of the liver, or any other of the group, is not primary but is an addition to the morbid process; or, at most, it acts but as a secondary or exciting cause. It then signifies no more than that tissues affected with overgrowth and degeneration are thereby rendered more vulnerable to those micro-organisms which give rise to inflammation. But though inflammation and hyperplasia are closely connected they are in reality very different processes. Inflammation is essentially a protective and *destructive* process; whereas the process which gives rise to scleroderma, muscular pseudo-hypertrophy, Hodgkin's disease, osteitis deformans, and other diseases of the group, is essentially self-contained and *constructive*. The one has a motive, the other has none.

Relation to malformations.—While degenerative hyperplasia and inflammation are distinct from one another the same cannot be said of hyperplasia and the malformations or errors of development. Everything that is known of these two goes to prove that they are identical. It is so usual to associate developmental errors with fœtal life that we sometimes forget that the processes of growth and development, with the possibility of running too far or in wrong directions, do not stop at birth, but continue even up

[17] Reynolds's System of Medicine, vol. v., p. 216.
[18] Virchow's Archiv (Oestreich), Band cxxv., 12 f., p. 85.
[19] Transactions of the Pathological Society of London, vol. xxiv., p. 454.
[20] American Journal of the Medical Sciences, October, 1893, vol. cvii.
[21] Brit. Med. Jour., vol. ii., Nov. 14th, 1885.
[22] New York Medical Journal, Jan. 13th, 1891, p. 665.
[23] Transactions of the Pathological Society of London, vol. xxxix., p. 262.
[24] Twentieth Century Practice of Medicine, vol. iv., p. 787.
[25] Brit. Med. Jour., vol. i, 1890, p. 1197.
[26] Transactions of the Pathological Society of London, vol. xxxvi., p. 140.
[27] THE LANCET, July 29th, 1893, p. 241.

to middle age, and then only to give place to processes which end in decay. During the whole of this period of the rise and decline of life growth may go astray, and the disorders which show themselves at different periods are necessarily tinged with the characters of the particular period in which they first appear. Thus we can hardly expect that a mistake in the processes of growth originating in the first month after birth will show itself in exactly the same way as one which takes place in the first month of fœtal life, nor ought we to suppose that a fault of similar nature starting in infancy will lead to the same results as one which first shows itself in middle or old age.

The differences that may in this way arise at different ages may be formulated as follows. Errors of growth taking place in early life may be expected to differ from those which first appear at a later age. 1. They will differ in being more rapid, in accordance with the greater rapidity of the processes of natural growth and development. 2. They will differ in being more definite and complete, owing to the same cause. 3. They will differ in being more widespread, for the same reason and because of the comparative smallness of the area to be covered. 4. They will differ in being more often multiple, because an affection taking place in a plastic tissue will naturally tend to implicate each of the different organs into which that tissue is moulded. 5. Errors of development occurring in early life must also be more often hereditary or family diseases, because it must of necessity happen that the stronger the taint the earlier will it tend to show itself. 6. Also in the case of double organs the more complete will be the compensation when only one is involved. On the other hand, when single organs are diseased the more profoundly will all those tissues be affected which are dependent upon them. 7. As a rule, the earlier in life the disease occurs the more defined will be its cause. Those malformations which occur in fœtal life we have no hesitation in calling idiopathic; those which first show themselves in infancy or childhood (e.g., cretinism, pseudo-hypertrophic paralysis, cirrhosis of the liver, or granular kidneys) we suspect may have some other cause; but those which first appear in adult life, such as myxœdema, cirrhosis of the liver, granular kidneys, splenic leucocythæmia, or Hodgkin's disease, we attribute to many causes. These etiological differences arise from the fact that before birth influences which can be brought to bear upon processes of growth are so scanty that, with the exception of syphilis and alcohol, they are a negligible quantity. But in later life there are many influences which may affect growth adversely and play their part in the production of disorder.

If we keep in view such considerations as these we find sufficient explanation for the fact that some diseases which were at one time thought to be distinct are now known to be in reality the same diseases modified by age. Thus, the skin disease of the harlequin fœtus is now recognised to be the same disorder as the ichthyosis of the youth or the young adult. It is the same disease, but more rapid in its development, more definite and complete, covering a wider area, more often hereditary, and affecting the functions of the body more profoundly. Goitre and arrest of growth of the thyroid gland in the fœtus give rise to a condition which is so different from the cretinism of the infant that it is sometimes looked upon as a different disease and called fœtal rickets. Cretinism of the infant, again, was at one time regarded as a totally different disease from the cretinism of the adult, and it was for this reason that the latter was so unfortunate as to receive a different name. It is now clearly recognised that these three diseases are but instances of the same disease affecting people of different ages. Myxœdema is the same as congenital and infantile cretinism, but is slower in its appearance, less definite and complete, less hereditary, and less disastrous in its effects. All these differences are due to the fact that in one case it first shows itself in an individual who has reached an age when all the processes of life are more subdued, while in others it acts upon the body at times of life when changes are rapid.

In the same way it may be shown that scleroderma, primary lymphatic enlargements, cirrhosis of the liver, granular kidneys, hyperplasia of bone, and similar affections of other organs are sometimes so modified by age that at different periods they may appear to be different diseases. But by making allowance for the effects of age and by tracing disease step by step in different cases, from fœtal life or early infancy to its appearance in adult life or middle age, we find that there is no gap between the conditions we meet with in early periods of life and those which we meet with in the later periods. In this manner we can trace, for example, an unbroken connexion between the granular kidney of the adult, and the absence, or mere fibrous vestige, of that organ which is sometimes met with in the fœtus; between complete absence of a thyroid gland and a fibrous goitre; between an atrophied suprarenal body and one which is cystic, fibrous, or "tubercular."

PATHOLOGY.

These facts and deductions enable us to understand the nature of the morbid process with which we are now dealing. They show that the four different forms which were referred to at the outset are but modifications in rate of growth or maturity. Simple excesses and defects of growth (hypertrophy and simple hypoplasia) are abnormal manifestations of the developing stages of tissue life, and may or may not terminate in premature degeneration. Degeneration and degeneration with overgrowth (degenerative hypoplasia and degenerative hyperplasia) are disorders of the declining periods of tissue life, and at whatever age they occur may be regarded as manifestations of local senile decay or of that which is equivalent to it. In no other way can the anatomical and clinical features of these diseases be accounted for.

Further evidence of the nature of these diseases is furnished by comparing these growth diseases with normal growth.

1. The clinical characters are such as we might expect to find in a primary perversion of growth. Thus the diseases are sometimes inherited because peculiarities of normal growth are to some extent heritable. They are progressive and remittent because natural growth is progressive and proceeds, not with absolute regularity, but by successive impulses, alternating with periods of comparative quiescence. They are pernicious and incurable for the reasons that healthy senile changes terminate either in complete extinction of the function of an organ or in death, and no one has yet been able to permanently arrest the progress of old age.

2. That they are disturbances of growth is also indicated by the way in which they are affected by those changes which influence the rate of normal growth. Hence they are peculiarly liable to appear during fœtal life, early infancy, puberty, and the menopause, and often originate in, or are improved or aggravated by, pregnancy and the puerperal state. Chronic Bright's disease, pernicious anæmia, and other primary anæmias and leukæmias, osteomalacia, Graves's disease, goitre, acute yellow atrophy of the liver, and Addison's disease are especially implicated in the physiological rise and fall of growth and nutrition which are incidental to child-bearing and the puerperal state, and such a fact as this is of the greatest significance in its bearing on the nature of these diseases.

3. The two kinds of degenerative changes (degeneration and degenerative overgrowth) are identical in nature, if not in quantity, with those which occur in organs affected with senile decay. Thus in the case of the liver granular and fatty degeneration of liver cells sometimes takes place in the old of exactly the same character, though less in quantity and intensity, as that which is found in "acute atrophy." Moreover, there is often decided increase in the quantity of connective tissue in old livers, like that which is sometimes so excessive in cirrhosis; and we may speak in a similar manner of the kidney, spleen, bone, and other organs. Anatomically, in short, degeneration, and degeneration with overgrowth, are exaggerations or caricatures of that which takes place physiologically in old age.

4. Moreover, all those factors which help to give rise to leucocythæmia, granular kidney, acromegaly, pernicious anæmia, and other disorders of their class are essentially of a depressing or ageing character. On the contrary, all those factors which have any influence in delaying the progress of these diseases have actions which are physiologically of the opposite nature. Hence, on the one hand, we find that anxiety, grief, and other depressing emotions, low-lying malarious districts or sunless valleys, repeated pregnancies, insufficient food and clothing, frequent losses of blood, syphilis, alcohol with its offspring gout, and old age itself, all act as causes of these degenerations; and probably nothing has been left outside this list that is of any consequence. All are debilitating and depressing, and the only one to which exception might

be taken on this score is, perhaps, the worst offender of all. I allude to alcohol. It both stimulates and narcotises, both elevates and degrades. It narcotises or depresses all the higher functions of the body and of the mind and lessens the acuteness of the sensations and perceptions. At the same time, it not only impairs functions but disturbs them. It acts upon one part more than another. It diminishes the influence of the inhibitors or controllers and thus indirectly stimulates those functions and qualities which it is their office to control. It stimulates also by dilating the blood-vessels and accelerating the action of the heart. But the action is that of a drug and not of a food: it is pathological and not physiological. This action, which is obvious when alcohol is taken in great excess, differs only in degree from that which is manifested when it is taken in small doses. A stimulant-narcotic action of this character is just that which is best calculated to bring about mixed overgrowth and degeneration and it amply accounts for the disastrous and paramount influence which is played by alcoholic excess in the production of cirrhosis of the liver, granular kidneys, and fibrous degenerations of the brain, lungs, and other organs. On the other hand, the only remedies which are of any use in delaying the progress of these diseases have in health an "alterative" effect which is of an opposite character to the above. These remedies are, among drugs, arsenic, mercury, the iodides, and thyroid extract; and, among hygienic measures, fresh air, sunshine, bracing climates, electricity, massage, good food, and congenial occupation and lively society.

5. Another feature of the degenerative diseases which points to their being of a senile character is their proneness to set in at times of life when the organs they affect are becoming extinct. Thus, myxœdema, though it may appear at any age, is prone to first show itself in women at the time of the menopause, whereas Graves's disease, which is a true hypertrophy of the thyroid gland, generally sets in during early adult life. Osteomalacia appears, as a rule, in women in the prime of life, at a time when the activity of the bone marrow is on the wane, while osteitis deformans does not show itself until middle age or old age, when the shafts of the bone usually first show signs of degeneracy. Prostatic enlargements generally first give rise to trouble between the ages of 55 years and 60 years, when the male sexual organs are becoming extinct.

6. These diseases also resemble senile conditions in their liability to become the seat of innocent tumours and cancers. Thus, degenerative hyperplasias of the stomach, pylorus, breast, tongue, thyroid gland, liver, bone marrow, and shafts of the bones, are all prone to give rise to innocent or malignant tumours. Of these diseases it is noteworthy that degenerative hyperplasia of the shafts of the bones (osteitis deformans) is far more often associated with malignant disease than is similar hyperplasia of the marrow (osteo malacia). This probably arises from the fact that osteitis deformans does not appear until late in life, when there is a double proclivity to the formation of cancer, the special proclivity of the disease being added to the general proclivity of old age.

Notwithstanding all that has been said, it is by no means certain that it is correct to speak of organs, the seat of degeneration or degenerative hyperplasia, as being affected with premature old age; for, as a matter of fact, exactly the same effect might take place as the result of mere defect of development. We might very well suppose that when an organ has been arrested in the course of its development those influences which give rise to growth or nutrition, though insufficient to produce or maintain cells of higher type, may yet be amply sufficient to lead to overgrowth of cells of a lower order. It is possible that we may in this way account for the fact that in these diseases we have not only degenerated cells, but embryonic cells, as in the large white kidney of Bright's disease, in the liver affected with pseudo-hypertrophic cirrhosis, in the bone marrow in osteomalacia, and in the blood in pernicious anæmia. On the other hand, it is conceivable that a senile change taking place in youth may be expressed in this same manner. We may well imagine that it may be attended, not only with considerable overgrowth of tissue of low type, but that there may also be some attempt at progress or repair due to infusion of new (embryonic) cells into the part affected. All that we are justified in saying is that the diseases which have been discussed are not primarily due to the action of any external or internal agent with which we are acquainted. They are further distinguished by the anatomical appearances of degeneration and atrophy of tissue of higher type with overgrowth of tissue of lower type; by the clinical features of sporadic origin, progressive but interrupted course, pernicious effects, and resistance to treatment; by showing as a rule some hereditary tendency; and by being influenced for the worse by certain depressing agents and conditions and improved by others which have the opposite physiological effect. They are especially liable to inflame, have near relations with the infective granulomata, and constitute favourable soil for the growth of innocent and malignant tumours. In these and other respects they show that they are malformations or errors of growth produced either by defective development or premature senile decay.[28]

(To be continued.)

ON THE RELATIVE VALUE OF SYMPTOMS OF ACUTE PERITONITIS.

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ANY operating surgeon must have found great differences of opinion existing amongst practitioners as to the presence or absence of acute peritonitis in cases where his interference is required. Why should this difference of opinion exist? Is it that peritonitis itself differs in different patients, or is it not rather due to the vague teaching to be found in text-books and in lectures on the subject? I believe that the latter reason is the true one, and yet the question is an extremely simple one. It is at the same time a most important one to settle and to settle quickly. In the old days the supervention of peritonitis was held to be tantamount to a sentence of death. That is not by any means the case at present. By opening the abdomen and free flushing with saline solution, accompanied or not by incision and emptying of the small intestine, some lives have been saved, but the symptom may be due to some mechanical condition which an intraperitoneal operation, if done early, may easily put right and peritonitis be averted; whilst if is deferred, under the erroneous impression that peritonitis is present alone, such delay may bring about the very condition which has been believed to exist and the complication of both, together with the exhaustion produced during the time which has elapsed, may render the chances of any effective interference hopeless, or at least extremely slight. Given a patient complaining of sudden and great pain in the abdomen we should be able to say at once and without hesitation whether he or she is suffering from acute peritonitis or not. Can we do so?

Let me collate a few authoritative statements from various sources. Spence[1] gives as symptoms of this condition "great pain, of an acute burning and persistent—not spasmodic—character, extending gradually from the vicinity of the wound over the whole abdomen. This pain is greatly increased by pressure over the abdominal surface or by stretching out the lower limbs. The patient generally lies with the limbs drawn up and the thighs flexed on the pelvis to relieve tension. The features at first are flushed and have an anxious expression. The skin is hot and dry and the urinary secretion is diminished. The tongue is at first of white milky appearance, but soon becomes foul and loaded. The pulse varies from 98 to 120 beats per minute and has a hard, wiry feel. As the disease proceeds the abdomen becomes tense and tympanitic and vomiting supervenes, at first of a bilious character, but subsequently of dark-greenish watery fluid. When the disease progresses to a fatal termination the vomiting, or the attempt to vomit, becomes almost incessant. The features become sharp, the pulse increases in frequency but becomes weak and irregular, and the patient gradually sinks."

Heath's "Dictionary of Practical Surgery" gives the following: "Pain, tenderness, and the impairment of visceral muscular functions; alterations in the temperature,

[28] Dr. Meigs of Philadelphia in his book on the "Origin of Diseases" has thoroughly elaborated this view of the identity of the changes which are found in certain fibrous degenerations with those which are produced by old age. This work is solely on the anatomical side and is well illustrated by many drawings from his own specimens.

[1] Lectures on Surgery, vol. ii., p. 973.

pulse, and respiration; the temperature commonly elevated a few degrees at first, followed in later stages by depression; the pulse is characterised by greatly increased rapidity and hardness, which in the acute form is almost 'wiry' to the finger; the respiration is sometimes quickened and shallow. There are changes in the demeanour and facial expression. Lastly, there is the act of vomiting."

Jakob[2]: "Severe abdominal pain, vomiting, greatly distended abdomen, elevation of the diaphragm, tympanitic percussion note, or if exudation has taken place dulness in the dependent portions, Hippocratic facies, and, after several hours, heart failure."

Treves[3]: "Initial rigor. Intense, widely diffused, sudden pain, with shock, collapse, and vomiting. Pain may exhibit exacerbations. It is at first referred vaguely to the umbilicus but soon becomes general. The face shows exhaustion, pain, and terrible distress. The abdominal walls are at first sunken in and in some cases of perforative peritonitis this contraction of the belly-wall may be extreme. They then become rigid and board-like and the abdomen—except in corpulent subjects—is flat. There is very considerable tenderness to the touch, which depends mainly on hyperæsthesia of the skin. Later, as meteorism appears, the abdomen becomes ..... rounded and barrel-like. The extreme hardness of the muscular wall is less noticeable and towards the close of the case the parietes may become comparatively flaccid. Abdominal respiration ceases, the movements of the chest are exaggerated. The patient, in order to relax as much as possible the strain upon the abdominal muscles, lies with his knees drawn up and with his hands above his head. This attitude is very characteristic. Meteorism may be absent during the whole progress of the case. Constipation is usually marked, but the bowels may be loose. The temperature is liable to such extreme variation that no certain type of fever can be described. The pulse is at first small, sharp, hard, and wiry—averages 120 to 160 per minute; becoming softer and feebler towards the close. Respirations are increased."

Senn,[4] who distinguishes between plastic and suppurative peritonitis, gives as the symptoms of the latter: "Shock, variable temperature, normal, subnormal, or gradually reaching 104°. Vomiting and diarrhœa frequently conspicuous. May be persistent vomiting and absolute constipation. The symptoms may be mistaken for those of intestinal obstruction, and the abdomen has been opened with this idea." Henrot, quoted by him, has described a number of cases of perforation of the gall-bladder and the processus vermiformis where the symptoms pointed so strongly to the existence of intestinal obstruction that a wrong diagnosis was made by able clinicians. Physical signs and symptoms are sometimes utterly inadequate to distinguish between acute intestinal obstruction and diffuse peritonitis. In differentiating it must be remembered that in the absence of a tumour absolute constipation and fæcal vomiting are the most characteristic symptoms of obstruction, and that in peritonitis the pain is severe and continuous, with diffuse tenderness, tympanites, and absence of visible intestinal coils. "*In mechanical obstruction of the bowels the temperature is, as a rule, not above normal unless complications have set in, while in peritonitis a rise in temperature is the rule, although in some of the gravest cases it is subnormal.*" I have emphasised this sentence because it seems typical to me of most of the assistance to be found in these works—not that it is any worse than many to be found in English or German books of the same kind. The fact may be true enough, but this section is supposed to be written in order to clear up our difficulties, not to increase them; and for any help to be gained from it it might as well, and indeed far better, have been left out. I defy any man to make out from such a statement whether in any given case any reliance is to be placed on the temperature or not. The first half of the sentence would imply that such reliance is justified. In our supposititious case the temperature is not raised. It is below normal. Then it cannot be peritonitis—but the second half of the sentence shows that this is a mistake. It may, on the contrary, be one of the gravest and most dangerous cases. What can result but mental confusion from such statements? They may be as true as you please, but they are utterly irrelevant and irritating in a paragraph which is presumedly written for the illumination of those who consult it.

[2] Atlas of Clinical Diagnosis, p. 203.
[3] System of Surgery, vol. ii., p. 612.
[4] Principles of Surgery, p. 298.

Now, if you combine and analyse all these statements you will find that they may be reduced to the following list: sudden and continuous pain; tenderness; hot dry skin; temperature elevated, normal, or depressed; hard "wiry" pulse; quickened respiration; tympanites; clear note on percussion, unless effusion has occurred, when there is dulness in the flanks; distended abdomen; altered facial expression; flexed thighs and characteristic position of the body; and, later, vomiting.

Take these symptoms in detail. Is there one of them characteristic, except, perhaps, the expression of the face? Such an expression is known well enough to those who have had much experience of this condition, but can anyone describe it? Describe it, I mean, so that a novice will recognise it when he sees it for the first time? I have never seen such a description, and I do not believe it to be possible. It is called an expression of great anxiety; but it is much more than that. It is a combination of anxiety, pain, dread, and a piteous inarticulate appeal for help, but no one who has never seen it would recognise it merely from that description. Photographs might here be useful, but there is something so cold-blooded in attempting to photograph a patient in great pain and misery that few would submit to it unless morphia were first given, and then the characteristic expression would be lost or so modified as to render it useless for teaching purposes. Besides, these patients are so restless that any photograph would be spoilt in the process of taking.

Sudden and continuous pain in the abdomen is possible in too many things to be of any value. Besides, pain being a subjective sensation cannot be accurately gauged by anyone but the patient herself, and everyone knows that during the experience of great pain any statement made by the sufferer is not to be relied on for any scientific purpose. Then the capacity for endurance of pain, even the very sensation of pain, differs so widely in different people that no standard by which an outsider can estimate it is possible.

It is said, for instance, that the continuous character of the pain differentiates it from that felt in intussusception or impacted calculus where the pain is dependent upon the wave of peristalsis in the tube affected, but this is simply an academic distinction; true enough, doubtless, but utterly untrustworthy at the bedside. You must rely for the estimation of this upon the patient's own statements, and if she is at the moment suffering she will answer "Yes" or "No" indifferently, careless altogether of your academic distinctions and only anxious to hurry you into giving her something which shall relieve the torment. Moreover, peritonitis, as Treves points out, has its periods of exacerbation, due equally to peristaltic action, and he need be a very acute observer indeed who can feel certain in his own mind that during the intervals the patient is feeling no pain at all or is still suffering some. Besides, does a patient with impacted calculus or intussusception suffer no pain except when peristalsis is in action? The alternative conditions shade so easily into one another as to this symptom that it is practically valueless from a diagnostic point of view. There is pain, and intense pain: that is all that, in the majority of cases, can be said.

And if this is true of pain how much more of tenderness upon which some writers—Treves, for example—lay so much emphasis? A woman with pyosalpinx will be acutely tender over the iliac and inguinal regions, though there may be no peritonitis whatever present. Pressure over an inflamed gall-bladder will usually elicit this sign. A patient with cystitis may be distinctly tender on pressure over the hypogastrium, and yet there may be no peritonitis. The most tender abdominal wall is that in which there is cellulitis of the subcutaneous tissue, wholly unconnected with the peritoneum which itself is absolutely healthy. Who does not know the hysterical abdomen, with its abnormal—apparent—tenderness? And who can possibly say how much of what appears to be tenderness in any given case is not nervous shrinking from possible anticipated pain?

As to hot dry skin I confess it conveys no special meaning to my mind. In the first place I have seen peritonitis when the skin has been distinctly cold to touch, and the temperature, as marked by the thermometer, has been subnormal, whilst a hot dry skin is found in so many abdominal conditions that its value as a diagnostic sign is absolutely *nil*.

The pulse is described by many as hard and "wiry." Will anyone define what a "wiry" pulse is? This, indeed, seems to be one of those terms which have been copied from text-book to text-book without due consideration. It is a

term which conveys no definite idea and, as a matter of fact, the pulse in peritonitis is not always even hard; by which is meant, I suppose, incompressible. Suppose an impacted urinary calculus in the ureter, with coincident nephritis, but no peritonitis at all. Is not the pulse in this condition harder, more incompressible, more "wiry," if you will, than in any septic peritonitis?

Tympanites and distended abdomen are two symptoms which are certainly as often absent as present. I have seen, as many others have done, peritonitis with a distinctly scaphoid abdomen. When they do occur they do so in a comparatively late stage and suggest intestinal paralysis or obstruction, which may be the result of peritonitis or of a good many other causes. What abdomen can be more distended or more tympanitic than that of a case of sigmoid volvulus, for example where there may not be a trace of peritonitis?

Vomiting, again, is not a symptom upon which any dependence can be placed. It may be due to irritant materials in the stomach or intestines, it may be due to foul smells, it may be due to many things besides peritonitis. When it becomes persistent it is too late to be of any service and even then is far more the consequence of intestinal paralysis, however produced, than of the peritonitis itself.

As to flexed extremities, if one was to trust to this alone we should diagnose peritonitis in all cases of simple colic, whether caused by lead or by improper and indigestible food, by the passage of gall-stones or of a ureteral calculus.

But it is often said you must not diagnose peritonitis by any one symptom, but by the combination of all. The same authorities, however, warn us that all may not be present, so that it is difficult to know in what cases we must depend on the first rule and in what we must depend on the presence of certain symptoms, and which. Such teaching is certain to leave the mind of the learner in a chaotic condition, with no feeling of certainty when in face of a definite case. And the fundamental reason is this, that whilst all these symptoms may or may not be present they are most of them not of the essence of the thing but represent possibilities in the case which may or may not occur.

Is it true, however, that we cannot depend upon any one symptom which when present is an absolute sign of this condition, and *vice versâ* the absence of which is an equally certain proof that peritonitis does not exist? a sign, moreover, which is objective and therefore does not depend for its security upon the loose statements of a patient half-maddened with pain. I believe that it is not true—that such a sign does exist easily demonstrable in all cases and capable of being estimated and estimated correctly by the observer himself. With acute peritonitis there is always rigidity of the abdominal muscles. Without peritonitis there is no rigidity. But it must be "rigidity." The surgeon who goes to his patient's bedside, flings down the coverings, and places a cold, possibly wet, hand suddenly on his patient's abdomen and relies on this sign will find all his patients suffering from this condition. But they are not. Such stiffening of the abdominal walls as he will meet with is not true rigidity, it is spasmodic contraction of the recti. The patient is not suffering from peritonitis, she is suffering from a totally different complaint, and its proper name is Dread of the Doctor. The physician who boasts of a list of from 60 to 100 patients every day is not to be trusted with this pathognomonic sign. He has no time to distinguish, and often, I fear, he has not the patience. Patience and time are essential. The hand must not be suddenly applied, nor should it be used in the standing position. The surgeon must find time to sit down. His hand must be warm, warmer, if possible, than the patient's skin. The tips of the fingers are not to be used. The entire hand should come in contact with the abdomen like a feather, so that it is almost impossible for the patient to say when actual contact is made. It should then lie without any weight almost entirely supported by the surgeon's own muscles for a few moments motionless, then gradually and gently move with an imperceptible sliding action over the surface. Thus, and thus only, will he be qualified to say whether or not there is actual muscular rigidity.

Can we demonstrate the truth of this? I think we can. Analogically, the abdomen is a large joint. To create a joint bone and cartilage are not necessary. A joint is primarily a normal solution of continuity between structures permitting of their movement the one upon the other. Such movement is produced by the action of muscular fibre. Between the structures is a membrane which secretes sufficient fluid to enable this movement to be easy, smooth, and painless. There is a telegraphic, automatic communication by means of a nerve arc with nerve centre, afferent and efferent nerve fibres, connecting the interior of the joint with the muscles which move that joint. Hilton long ago demonstrated this with reference to the bony joints of the body, and Thomas based his method of treatment—now of world-wide acceptance—upon this fact. Any inflammation of the lining membrane produces such irritation of the intra-articular afferent nerves as to be at once and automatically referred to the nerve centre in the spinal cord whence it is as instantaneously conveyed to the muscles moving that joint, and produces in them a tonic contraction, nature's own admirable method of securing rest to the parts affected; and this is precisely what occurs, and must occur in this, the largest joint of all. The rigidity is not confined to the abdominal muscles, though its occurrence in them is perhaps the more easily noted. But it is the cause of the flexed thighs which have been pointed out by so many observers as a separate and distinct sign, but which is now seen to be correlated with the abdominal contraction and explainable by the same law; the psoas and iliacus muscles are part of the muscular coating of the abdominal cavity, influenced by the same nerves and forced to contract in the same way, and show their sympathetic contraction by the flexed drawn-up thighs. It is probable, too, that some of the difficulty experienced in obtaining fæcal evacuations in peritonitis is due to a rigid condition of the levator ani which also forms part of the muscular covering of the peritoneum. Many of the symptoms noted are thus seen to depend upon a common cause—a cause which is inherently present in all cases from the very nature of the condition.

The operation of this law may, indeed, be traced in other "visceral joints," as Kelynack terms them. In acute pleurisy where the "synovial" membrane, the pleura, is affected is not one of the earliest and most characteristic signs the fixation of that side of the chest in which the pleurisy is situate? In inflammation of the tunica vaginalis is there not tonic contraction of the cremaster and dartos muscles, so markedly different from simple hydrocele, which is not dependent on any process of inflammation at all, but is due simply to a loss of the normal balance between secretion and absorption. In cerebral meningitis we have the rigid neck so characteristic of that affection, and in infective spinal meningitis the rigid erector spinæ, but however that may be, and whatever importance may be attached or not to such additional illustrations of Hilton's law, it is indubitable that in the case of the peritoneum it furnishes us with a clear, concise, and scientific criterion upon which we may safely base our diagnosis, a symptom which we can all appreciate, and which will put an end to the miserable indecision from which we have all suffered—no one, perhaps, more than the present writer.

Are cases required to illustrate this dictum? Here are three, each in its way, I think, instructive. In March of this year I operated upon a man who suffered from intussusception of the sigmoid flexure into the rectum. 14 days after a preliminary colotomy I performed Maunsell's operation through a median abdominal incision. Two days later I received an urgent message from my house surgeon to the effect that peritonitis had developed. It was very possible. In such an operation, as is well known, the interior of the intestine is exposed, and the fingers and instruments of the operator, after touching the mucous surface in removing the intussusceptum, are applied again to the peritoneal surface whilst closing the longitudinal incision in the intussuscipiens. No one under such circumstances can feel sure that he has performed an aseptic operation. When I saw the patient he had been vomiting, he was complaining of pain, and his pulse was thin, rapid, and weak. The temperature was 101° F. and his general appearance was decidedly bad. He was lying low in bed, and altogether, if one was to rely on the symptoms usually detailed in text-books, my house surgeon was fully justified in his diagnosis. But the abdominal wall was everywhere supple and with perfect confidence I put peritonitis altogether on one side. The result justified my opinion. A hypodermic injection of strychnine, repeated in four hours, together with stimulants and some stomachics, put a totally new aspect on affairs, and everything went well. The patient recovered and nothing more was heard of peritonitis.

The second case was even more critical. A woman, aged 28 years, came into hospital with the largest double pyosalpinx I have yet seen. The mass extended to the level of the umbilicus, her temperature was 103° F., her legs were drawn up, and she was in very severe pain. During removal of the greatly enlarged tube of the left side some thickened omentum which had plugged the fimbriated extremity tore away, allowing the escape of some thin, ichorous pus. The majority of this was caught on sponges, but one could not be by any means sure that some had not escaped and soiled the peritoneum. The abdomen was dried out and closed without drainage. She suffered from bronchitis and for some days was extremely ill. The temperature went up again on the fifth day to 103° F. The pulse was 116 and the respirations were 36. But the abdomen remained supple throughout. A month later she developed a subdiaphragmatic abscess which was opened and washed out. At length the patient perfectly recovered. Now, although this pus was virulent enough to produce cellulitis behind the peritoneum, ending in abscess, peritonitis was never present. This case proves perhaps still more forcibly the power of the peritoneum to dispose of micro-organisms under prompt purgation with calomel, but it demonstrates also the value of this sign (muscular rigidity), absence of which was throughout depended upon and proved reliable.

The third case, ending in death as it did, enabled us to prove by post-mortem examination the truth of my contention. It has not been the only one, but is, I think, sufficient.

During the last few years I have been investigating as to the possibility of sealing all abdominal wounds with celloidin, so as to avoid the use of dressings, bandages, &c., and I published in April of last year in the *Medical Chronicle* several cases illustrating this practice. One of my earliest cases was fatal. A large subcutaneous hæmatoma formed, owing no doubt to defective hæmostasis, and deceived by the absence of swelling and redness, which is one of the results of this method, I did not diagnose it. The skin was, as might be expected, extremely tender; the patient's temperature rose to 102° and she died five days afterwards, with all the symptoms so common in septic peritonitis, from septic intoxication, but the abdominal wall, tender as it was, was always supple. Post-mortem a large accumulation of broken-down offensive blood and pus was found in the subcutaneous and submuscular tissues. The peritoneum beneath, however, was absolutely closed and free from all signs of inflammation. There were no adhesions, no redness; all was absolutely smooth and unchanged. The intestinal coverings were absolutely normal. No case has to my mind, although I have seen many, so absolutely proved the value of muscular rigidity in determining the presence or absence of acute peritonitis.

The presence or absence of acute peritonitis can, therefore, in all cases be gauged with absolute certainty by the presence or absence of this one essential sign. Inasmuch as this rigidity is temporary, lasting about three or four days, it is useless as a pathognomonic sign in cases of chronic peritonitis, which differs from acute in course, causes, importance, and treatment. But in acute peritonitis it is always necessarily present, and that during the time in which a diagnosis has to be made if it is to be of any value at all.

Manchester.

SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.—The eleventh annual meeting of the Bristol branch of this society was held on May 29th, under the presidency of the high sheriff. The report stated that 428 complaints were attended to during 1899 and these affected the welfare of 967 children and involved 570 offenders. The financial statement showed that the total local expenditure amounted to £560 and there was a favourable balance of £3 remaining.

VACCINATION LAW.—At the meeting of the Frome (Somerset) Board of Guardians held on May 30th the vaccination officer for the Nunney sub-district reported the result of a prosecution at the magistrates' court on May 24th, when one of the arguments of the defending barrister was that there was no evidence of any kind to show that the notice which the public vaccinator had sent by halfpenny post had reached the person to whom it was intended. The public vaccinator for the Nunney district was therefore requested to send the notice in future by registered post, the cost of which would be defrayed by the guardians.

THE INFLUENCE OF THE BUXTON THERMAL WATER ON THE EXCRETION OF URIC ACID.

BY WILLIAM ARMSTRONG, M.R.C.S. ENG.

THE Goulstonian Lectures of 1897,[1] in which Dr. Luff so ably dealt with "The Chemistry and Pathology of Gout," marked a distinct advance in the treatment of that disease. It was shown that in the Gowland-Hopkins method there was at command a test which, while it showed the exact amount of uric acid passed, did not throw down the xanthins and hyper-xanthins—the great blot on certain other methods in general use; the necessity for the purpose of exact observation of testing a sample of the mixed urine of the 24 hours was pointed out; and more than all it was clearly demonstrated that the gouty patient, so far from passing uric acid in excess, in the great majority of instances passed too little; that there was a daily storage going on which, although small in amount, was still sufficient to keep up certain morbid conditions; or if it had no such gradual outlet eventually culminated in an acute attack of articular gout. In repeating these experiments I observed that in patients drinking or bathing in the Buxton thermal water there was a constant and in some cases a considerable increase in the quantity of uric acid excreted, and that this action was the more marked as the natural temperature (82° F) was approached. Neither the mineral constituents nor the temperature of the water accounted for the facts observed, while nitrogen gas, although present in very large quantity, had always been looked upon as a simple element which was therapeutically inert. It seemed rather significant, however, that Wildbad, Gastein, and Buxton—all associated with relief to the gouty—possessed nothing in common, both temperature and mineral constituents differing, except the presence of nitrogen, and it could not be overlooked that the recent researches of Lord Rayleigh and Professor Ramsey had shown that gas to be not an element but really a very complex body, the whole chemistry of which is probably not yet known.

With a view to finding, if possible, the *rationale* of the "gout cure" for which the Buxton thermal water had so long been noted, a large number of observations and many control and cross-experiments have been made. Over 300 persons have contributed to this investigation. They were of various ages; all except ten suffered from gout in one form or another; these ten were persons in normal health, showing no signs of the gouty diathesis. Their ordinary mixed dietary was not altered in any way. Some of the patients only drank the thermal water, 24 ounces being taken daily, divided into three doses; some bathed only; while a third section both drank and bathed. In all cases the 24 hours' urine was tested, and the first two examinations were made before either the bathing or drinking "cures" were commenced.

The Buxton thermal water is discharged from the earth at a temperature of 82° F. It is soft, clear, and of a light bluish colour, almost free from taste, and without odour. Several exhaustive analyses have been made, the most complete by Dr. Thresh, who devoted much time and care to the investigation. His results were as follows. Calculated into grains per gallon the water was estimated to contain: bicarbonate of calcium, 14·01; bicarbonate of magnesium, 6·02; bicarbonate of iron, 0·03; bicarbonate of manganese, 0·03; sulphate of barium, 0·05; sulphate of calcium, 0·26; sulphate of potassium, 0·62; sulphate of sodium, 0·84; nitrate of sodium, 0·03; chloride of calcium, 0·02; chloride of sodium, 3·10; chloride of ammonium, trace; chloride of magnesium, 0·95; silicic acid, 0·95; organic matter, 0·02; carbon dioxide, 0·20; nitrogen, 0·19; total, 27·32. Lithium, strontium, lead, and phosphoric acid, traces. There were six cubic inches of nitrogen gas to the gallon and a small quantity of carbonic acid gas. This nitrogen has been carefully tested and contains 2 per cent. of argon and a trace of helion. It will be seen that the mineral constituents are small in quantity and of slight therapeutic power and that

[1] THE LANCET, March 27th and April 3rd and 17th, 1897.

there is a large quantity of nitrogen gas, a little in suspension, but by far the greater quantity in solution.

The following lines were laid down for the purpose of this investigation: (1) to note the effect of drinking the thermal water as it emerged from the spring; (2) to eliminate (*a*) by cooling and (*b*) by heating, the contained gases and to note the comparative effects; (3) to test the relative effects of drinking ordinary water at the same temperature; and (4) to note the effects of bathing in the thermal waters at 82° F., 90° F., 98° F., 100° F., and in the ordinary water at 82° F. and at 100° F. The average quantity of urine for the 24 hours before treatment commenced was a little under 46 ounces in the non-gouty and about 41 ounces in the gouty; in the former the uric acid averaged 0·780 grammes per day and in the latter 0·660 grammes.

Drinking (over 60 cases).—1. Thermal water drunk at the spring at 82° F. Average urine after one week, 57 ounces; uric acid, 0·799 gramme. 2. Thermal water allowed to cool to 70° F. Average urine, 45 ounces; uric acid, 0·700 gramme. 3. Thermal water heated in closed vessel to 110° F. Average urine, 48 ounces; uric acid, 0·696 gramme. 4. Ordinary drinking water at 110° F. Average urine, 47 ounces; uric acid, 0·696 gramme.

Bathing (over 100 cases).—1. At 82° F. Average urine, 55 ounces; uric acid, 0·939 gramme. 2. At 90° F. Average urine, 50 ounces; uric acid, 0·874 gramme. 3. At 96° F. Average urine, 47 ounces; uric acid, 0·777 gramme. 4. At 100° F. Average urine, 40 ounces; uric acid, 0·680 gramme. 5. Bath in ordinary water at 82° F. Average urine, 41 ounces; uric acid, 0·675 gramme. 6. Bath in ordinary water at 100° F. Average urine, 38 ounces; uric acid, 0·669 gramme.

Drinking and bathing at 82° F. (over 100 cases).—Average urine, 60 ounces; uric acid, 1·004 grammes.

While drinking the water the quantity of uric acid excreted gradually reached its maximum in from 14 to 20 days, kept about this figure for another seven or eight days, and then gradually declined to the normal amount. This was also the rule when bathing in the water heated to 90° F. and over; but *immersion* alone in the water at its natural temperature (82° F.) was often followed by a considerable increase in uric acid excretion from the very first bath. It will be noted that this bath contains the full amount of nitrogen gas undisturbed by heating.

The results of this investigation may be summed up as follows: (1) that the excretion of uric acid and the flow of urine are both largely increased by the drinking of, and by immersion in, the Buxton thermal water; (2) that it is more efficacious when bathed in than when drunk as regards uric acid excretion; (3) that the diuresis is somewhat greater when drunk than when used as a bath; (4) that any deviation from the normal temperature either by heating or cooling interferes with its efficacy; and (5) that while the alterations in temperature would not be likely to diminish the therapeutic properties of the salts they would, on the other hand, greatly interfere with the contained gas.

The late Dr. Robertson, so long the leader of the medical profession in Buxton, who did so much to press forward its claims as a gout spa, wrote: "It may be advanced that the modern researches of chemistry have caused more and more importance to be attached to the great elementary principle with which the Buxton tepid waters are surcharged. The very large proportion of nitrogen contained in the essential crystallisable principles of tea, coffee, and cocoa, in taurine, the great azotised constituent of the bile, in the various fibres and tissues, in the secretions and excretions of the body, the consumption of nitrogen shown to be involved in every movement and process of the animal systems, are so many indications of the inference deducible from the great advance of modern chemistry, and so many reasons why this nitrogen in an available form for internal and external use may have a significance which may hardly admit of exaggeration. Argon being much more soluble than nitrogen and therefore more rapidly absorbed through the skin and mucous membranes appears to give an additional explanation of the influence on the tissues of the body of these nitrogenous waters."

Dr. Thresh writes: "Doubtless much of the gas is liberated within the very pores of the skin itself during bathing and acts in what may be considered its seminascent state, producing effects altogether unattainable by the use of the same agent in any other condition."

It is also interesting to note some recent work regarding the chief mineral constituent of the Buxton thermal water, calcium bicarbonate. Kionka of Breslau gave powdered eggshells to birds and by this means increased the excretion of uric acid from 40 to 50 per cent. Van Noorden has recommended the use of lime in this form as a remedy for gout. It is not impossible therefore that in the combined action of the nitrogen gas and of the lime salts may be found the explanation of the undoubted influence of the Buxton thermal waters on uric acid excretion. If it be true, as seems to have been proved beyond doubt, that the manifestations of gout are largely due to deficient excretion of uric acid, it is of importance that a natural water which so largely increases that elimination should have its therapeutic position placed upon a definite scientific basis.

Buxton.

ON SUPRAPUBIC LITHOTOMY IN OLD MEN WITH ENLARGED PROSTATE.[1]

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WE have but to look through any pathological museum to realise how irregularly an enlarged prostate disports itself and to notice a well-marked pouch behind the middle lobe in a great number of the specimens. The capacity of this pouch during life is readily ascertained by measuring the quantity of so-called "residual urine" that can be drawn off, quantities of two, four, or even more ounces being met with. Gravel in small fragments or well-formed calculi coming down the ureters emerge into this pouch and there lie, unable to surmount the barrier offered by the middle lobe of the prostate to escape per urethram; they may remain there unsuspected for months without causing symptoms. Cystitis with decomposition of the urine does not always follow; in two of my cases the calculi were numerous, uric acid in composition, and the urine was acid. The symptoms under these conditions are so slightly different from those of enlargement of the prostate that the existence of stone is sometimes overlooked. Slightly increased frequency of micturition and occasional pain may attract attention; in one case a little blood was noticed in the urine on one occasion. Should catheter life be entered upon then cystitis often complicates the case, septic in character in most cases from want of due precautions; the urine becomes ammoniacal and purulent, severe pain is often present, blood is more frequently passed, and the calculus becomes encrusted with rough phosphates. When in a case of enlarged prostate with any degree of residual urine symptoms become in any way exaggerated it is well as a routine practice to sound for stone and if the prostate be very large to use a special sound (Kane's) or cystoscope to explore the pouch behind the middle lobe. An ordinary bladder-sound will occasionally fail to discover a stone in this pouch and aspiration sounding is not always to be relied upon. It is hardly necessary to emphasise the importance of a thorough cleansing of the urethra and the sterilising of the sound before use; the bladder in these cases is particularly liable to be infected, and if it becomes so it adds greatly to the gravity of the condition. Having ascertained the presence of a stone, how best to deal with it becomes the question. Given an old man with an enlarged prostate, the stone in a pouch behind it, a congested, friable, possibly ulcerated mucous membrane, maybe some degree of septic cystitis, and the bladder-wall containing numerous small pouches bounded by prominent fasciculi—is the operation to be lithotrity or lithotomy?

The objections to crushing in these cases are: (1) the difficulty, or even the impossibility, of seizing the calculus; (2) if caught and broken, then the difficulty in finding the fragments; and (3) granted the possibility of crushing, then, aspiration diffusing the fragments into the innumerable pits in the mucous membrane, the great uncertainty of washing out all the pieces, for in these cases the patient cannot be trusted to pass any portions left behind, they will lodge behind the prostatic enlargement and form nuclei for fresh calculi.

[1] A paper read at the Liverpool Medical Institution on March 8th, 1900.

The difficulty of seizing a calculus behind an enlarged middle lobe with a lithotrite will be readily understood on examining museum specimens. In the first case to be mentioned, after luckily finding the stone with an ordinary sound before placing the patient under an anæsthetic, we utterly failed to find it afterwards with sound or lithotrite, although the patient was rolled about on the operation table and the base of the bladder manipulated through the rectum. That fragments are left behind after lithotrity seems very likely when we read of cases crushed many times (five, six, nine, and ten times). Over 20 per cent. of cases in a recent table published by a skilled lithotritist required subsequent crushings. Perineal lithotomy is not applicable owing to great increase in the depth of the perineum, to such an extent in some cases that neither finger nor forceps can reach the stone. The suprapubic operation carried out with modern precautions is simple and almost bloodless; it enables the bladder to be thoroughly explored and allows of the extraction of the calculus and of treatment of the enlarged lobe if thought advisable. It becomes the proceeding of choice in the cases under consideration. Further, the bladder can be sutured and the wound be treated antiseptically.

Before resorting to the operation it is advisable to render the urine and urinary tract as sterile as possible. If cystitis with ammoniacal urine be present, the administration of urotropine in five-grain doses thrice daily and washing out the bladder with chinosol lotion (1 in 1200) twice a day, or oftener, have answered best in my experience. Boric acid is much too feeble an antiseptic if the urine be "high." Chinosol is non-poisonous and a powerful antiseptic. It is imperative that every aseptic and antiseptic precaution should be taken in urethral and bladder surgery; to do so means absence of rigors and complications. There is an idea far too prevalent that any catheter from an old drawer or hand-bag smeared with that abomination—carbolic oil—will do. The catheter should be boiled or steamed, the glans penis should be thoroughly cleansed with chinosol lotion, and the urethra should be washed out with the same. The lubricant used is a mixture of soft soap, glycerine, and water in the proportions of eight, six, and four. Four grains of potassium mercuric iodide dissolved in four ounces of water before mixing makes a proportion of nearly 1 in 2000.[2] In ordinary cases, without ammoniacal urine, the administration of urotropine is enough. It is useful in all bladder, urethra, and kidney cases that require surgical treatment to administer urotropine internally for a few days before operation—that is, of course, if the condition does not urgently demand operative proceedings.

Operation.—The pubic hair having been shaved and the skin prepared for an aseptic operation, a purgative is administered on the day before, and the rectum is washed out on the morning of the day of operation. The patient having been anæsthetised, a catheter is passed to empty the bladder and to allow of washing out if necessary. An inflator, ball syringe, or, better still, a small bicycle pump, is attached to the catheter. An incision, three or four inches long, is made in the middle line of the abdomen above and extending on to the pubes, the cut is deepened until the extra-peritoneal fat is exposed immediately above the pubes, retractors now keep the sides apart, one rectus being nicked if enough room is not obtained. Air is pumped into the bladder until the viscus rises into the wound like a balloon; the peritoneal reflexion is seen moving upwards. A couple of silk loops are passed through the muscular coat of the bladder by means of a handled needle; these serve as fixation points and are held by an assistant to keep the bladder well up in the wound after opening. A small incision is made in the bladder and the air escapes. The catheter is withdrawn and the finger is passed in to locate the calculus and to ascertain its size. If small, the stone can be readily extracted by Tait's gall-stone forceps, which takes up less room than the unnecessarily clumsy lithotomy forceps; if large, the wound in the bladder is extended, the mucous membrane being divided to a lesser extent than the muscular coat, blunt hooks are inserted above and below to keep the opening on the stretch, and a pair of lithotomy forceps is used to seize the calculus. After the calculi have been removed the bladder is thoroughly examined with the finger and an inspection is made of the interior, aided by light from a forehead electric lamp. The bladder wound is sutured, continuous chromic gut for the mucous membrane and continuous silk *à la* Lembert for the muscular coat being employed. The bladder suture is now tested by air distension, and if secure a few ounces of chinosol lotion are used to wash out any small blood-clot that may be in the bladder. The silk loops are removed and a small incision is made through the skin to one side of the middle line to accommodate a small glass drainage-tube passed down to the neighbourhood of the sutures in the bladder-wall. The original skin incision is closed by sutures and a gauze dressing under a double spica bandage is applied. The catheter is left in the bladder, tied in position, and by means of a rubber tube attached to it it conducts urine into a vessel containing lotion for a few days. The bladder is washed out with a few ounces of chinosol lotion daily. Four cases in old men have been operated upon, the above description in all its details being, however, only applicable to the last two. The patients' ages were 61, 63, 70, and 80 years, they all recovered without complications, and they have remained free from calculi. The following are the cases.

CASE 1.—The patient was a man aged 61 years. On August 22nd, 1897, he had severe renal colic, right-sided, which lasted 48 hours in all; the urine was thick and he had great pain in the penis when passing urine. He had been troubled with frequency of micturition for months, but had never required catheterising. On August 24th, when he came under observation, the urine was faintly acid, of specific gravity 1022, and contained blood but no pus. The bladder had two ounces of residual urine. The ordinary sound revealed a calculus. On the 27th before administering an anæsthetic the stone was sounded under chloroform. On asking the dressers to "feel" the stone the sound could not strike it, and although we rolled the patient about and had the base of the bladder manipulated from the rectum neither sound nor lithotrite could find the stone. Lithotrity was thus clearly out of the question. Suprapubic lithotomy was performed, boric lotion was used to distend the bladder, and the stone was found in a deep pouch behind the middle lobe of the prostate. No ordinary lithotrite could possibly have grasped it. On the sixth day the catheter was withdrawn and on the ninth day the glass drainage-tube was removed. Two days later he developed an attack of bronchitis, which delayed his convalescence, but his bladder remained all right, but on two occasions we washed the bladder out as a precaution. The calculus removed weighed 46 grains and consisted of uric acid coated with phosphates. In January, 1900, it was ascertained that he had had occasional turbid urine since the operation, but washing out with chinosol lotion put that right. The bladder was examined with no evidence of calculus.

CASE 2.—A man, aged 70 years, was seen in consultation with Mr. J. F. Ronayne of Liverpool on June 26th, 1897. For the last six months the patient had been troubled by greatly increased frequency of micturition, and latterly dribbling of ammoniacal urine; he had occasional severe spasms of pain on micturition and some blood had passed. He had a very large prostate as felt through the rectum. On passing a sound a calculus was found at the bladder orifice of the urethra; the passage of the sound pushed it into the bladder, and it became lost in a pouch behind the enlarged prostate. On June 29th suprapubic lithotomy was performed. The catheter was removed in 48 hours on account of the urine passing alongside it. A glass drainage-tube was removed in 72 hours. On the fourth day a little urine escaped through the sinus left by the drainage-tube; this was not repeated and on the eleventh day the patient was up and about. The calculus weighed 120 grains and consisted of uric acid covered with rough phosphates. On June 23rd, 1899, there was some cystitis, the urine was acid, and there was ropy mucus. There was no calculus. The bladder was washed out.

CASE 3.—The patient was a man, aged 63 years, under the care of Dr. W. McGeagh of Liverpool. He was seen on Feb. 17th, 1899. For two years he had had greatly increased frequency of micturition and blood was noticed in the urine once. Lately he had suffered from severe pain in the perineum. The prostate was much enlarged. There were two ounces of residual urine. The bladder was examined by the cystoscope; a collection of reddish-brown calculi was seen in a pouch behind the prostate. On the 20th suprapubic lithotomy was performed; at the operation Dr. R. T. McGeagh and Dr. W. McGeagh assisted. Air distension was used. 15 calculi, uric acid in composition and weighing 140 grains, were removed. The catheter was removed daily, cleansed, and re-introduced. The catheter and drainage-tube

[2] Messrs. Clay and Abraham, chemists, Liverpool, put up this lubricant soap in collapsable tubes.

were removed on the third day. On the fourth day the patient was much troubled by flatus, the abdomen became distended, and he vomited. A turpentine enema was administered which caused a free evacuation and he was soon well. On the tenth day he got up. In February, 1900, he was well and strong, doing heavy farm work.

CASE 4.—The patient was a man, aged 80 years, under the care of Mr. J. Herbert Sykes of Birkdale. He was seen on March 2nd, 1899. 15 months previously he had passed some gravel. He had experienced extreme irritability of the bladder since. Hurrying caused pain. The urine was acid and contained blood. Cystoscopic examination revealed several calculi behind the middle lobe of the prostate. On March 16th suprapubic lithotomy was performed, Mr. Sykes assisting. Air distension was used. Six calculi were removed; they were uric acid in composition and weighed 133 grains. The catheter was removed on the sixth day and the glass tube on the eighth. The patient got up in three weeks. He had no complications, but he was feeble and the weather was cold, so he was kept in bed longer than were the other patients. On March 3rd, 1900, the patient was keeping very well. He had some tenderness over the operation scar but no pain. He passed urine every two hours and occasionally uric acid dust.

Liverpool.

MONOGAMY IN ITS RELATION TO LONGEVITY AND THE DISEASES OF LATE LIFE.

By HARRY CAMPBELL, M.D., B.S., F.R.C.P. LOND.,

PHYSICIAN TO THE NORTH WEST LONDON HOSPITAL AND TO THE WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM.

THE increase in the death-rate from cancer has of late attracted, and rightly attracted, the attention of medical men, and various opinions have been advanced to account for it. One reason doubtless is that owing to the increased average length of life more people live into the cancerous age now than formerly. Some hold this to be the entire explanation and doubt if there has been any increase in the individual tendency to the disease. I believe, however, that I can see one reason why the individual tendency should increase, and though the suggestion I have to offer may at first sight appear chimerical I yet hope to advance a convincing argument in its support. My contention is that monogamy tends to favour the increase in our race of all late-life diseases, cancer among others, and to shorten the vital span.

Intent on his microscope and test-tubes the pathologist is all too prone to overlook first principles. I have long wondered at his indifference to some of the grand truths of biology—at his failure to realise, for instance, that in order to maintain a high standard of racial efficiency there must be a ceaseless and rigorous elimination of the unfit. The belief that we can rear a healthy race by a perfect system of sanitation, and by that alone, is one of the most grievous fallacies of our time. Sanitation is doing much, and will do more, but it will never by itself secure a supremely healthy race. This end can only be attained by a vigilant weeding-out of the unfit. We are seeking, but shall ever seek in vain, to elude the inexorable law.

No species is, or ever can be, stereotyped. No two organisms are born exactly alike. Taking all the children of a family, and striking their mean standard of fitness, we find that some surpass, while others fall short of, this standard, and it is quite impossible to prevent racial deterioration unless those who fall *far* short are eliminated. I here refer to general fitness, but my proposition applies to each and every character of the individual. To take an example. A high *racial* (I use this term as distinguished from *individual*) excellence in respect of visual accommodation can only be maintained by a stringent elimination of those displaying errors of refraction. In civilised communities such are not eliminated, and consequently the race is deteriorating in respect of eyesight. In this instance the defect is remediable and the loss is in the main an æsthetic one, but countless other instances could be mentioned in which defective elimination is lowering the efficiency of our race, and in consequence we have among us a vast multitude of the unfit. As a physician I am seeing every day of my life people whom I am compelled to class among nature's failures—people who fall short of the standard which makes life worth living, people who in virtue of their unfitness suffer more than they enjoy. When, therefore, I see, and share in, the vain struggle to patch up such failures and when I read elaborate systems on treatment I ask myself: Why not look facts sternly in the face and strike at the root of the evil by conforming to the supreme and inexorable law? I am convinced that some day this will be done, and that the wilful begetting of inefficient humans will be looked upon as scarcely less serious than the destruction of those already launched into being.

I make these observations because it is needful for my argument to insist upon the importance of this factor of elimination in keeping down the tendency to disease. In my work on "The Causation of Disease" I lay it down as an axiom that all non-accidental deaths occurring before the end of reproductive life are, racially considered, deaths of the unfit, such deaths acting beneficially on the race by limiting the production of unfit offspring. If the unfit individual dies before the procreative period he can leave no offspring whatever to inherit his unfitness; if he dies during this period he has an opportunity, increasing with every year of survival, of leaving unfit offspring; while if he dies after the procreative period he has had the opportunity of leaving his full complement of such offspring. Hence so far as the racial effect of death from unfitness is concerned, it is greatest when it occurs before the reproductive period, becomes less and less as it occurs later and later in this period, and ceases altogether when it takes place after it. The purifying action of elimination varying thus at different ages, we find the tendency to grave disorder is least before procreative life, steadily increases during it, and rises enormously at its termination. Inasmuch as post-procreative life comes not at all under the corrective influence of elimination I should expect to find the organism manifesting many defects directly this period is entered upon. I should, indeed, be prepared to find, not only an enormous increase in the tendency to disease at this time, but *a tendency for all organisms, vegetable as well as animal, to die soon after* the cessation of reproductive life. How far this conclusion is borne out by observation I know not, but I believe it is true of man.

This line of thought renders it important to determine the average limit of the procreative period in man. The most vigorous specimens of the human male certainly retain procreative power beyond the allotted age of the Psalmist; and we owe it, I believe, to this very circumstance that many of us are able to reach or even live beyond this limit. Had no man during the last 100,000 years got offspring after the age of 50, we should all probably tend to die of old age about this time. There has, however, been no such limit to reproduction. In primitive communities, e.g., the man who by his great physical superiority becomes the warrior-chief or king may continue to get children until well on in years, and may thus leave many more children than the average man. Now children thus got, female as well as male, tend by the law of heredity to live as long as their father, to resist deadly disease as long as he. It is true that children got by fathers who procreate into old age must have always formed a small proportion of the total number of children born. Nevertheless, they have, I contend, exercised a leavening influence on the race, an influence which has been at work from the time of the ape-like man. The ability to live into the sixties and seventies, or even longer, we owe to the vigorous man of fine physique who retains his procreative power into advanced life. The woman, on the other hand, has played no part in the evolution of this power: her ability to live beyond 40 or 45 has no racial influence, since it does not increase her opportunity of leaving offspring to inherit it.

Now in civilised communities the tendency, observed in the more primitive ones, for the man who lives to a vigorous old age to leave more children than the average man is not great. The majority of men among the civilised have children by one wife only, and she is generally about the same age as the husband. The effect of this is to reduce the age-limit of reproduction in the man to that of the woman. A man, therefore, marrying a woman about his own age, and possessing the power of propagation into advanced life, leaves no more children to inherit his superior death-resisting powers than the inferior man who dies at 45. Monogamy in such a case reduces the superior man to the reproductive level of the inferior man, and robs the race of a number of

individuals whose birth would diminish the racial tendency to disease in the later years and increase the racial span of life. The effect of monogamy, in fact, is to increase the racial tendency to disease after middle life and to shorten the vital span.

Among the diseases one would expect to be increased by the monogamous limitation of procreative life is carcinoma Reckoning for the sake of argument 40 years (which is, indeed, below the mark) as the average age-limit to procreation among monogamous people, we must regard carcinoma as essentially a disease of post-procreative life and one on which elimination has little or no racial effect. Before the individual with a tendency to this disease develops it he has had abundant opportunity of leaving children to inherit the morbid tendency. Nothing hinders his contribution to the species being as great as that of the individual possessing the minimum tendency to malignant disease. Thus monogamy tends to increase the percentage of cancerously disposed individuals.

While, however, monogamy is thus exercising an injurious influence on our race, polygamy is a sociological impossibility, and happily we have at our disposal a much more efficacious means than is afforded by it of securing to the fittest the largest number of offspring—of giving full play to that searching process of elimination which alone can sustain a high level of racial fitness. Nature's method of elimination is a merciless one; she unceremoniously sacrifices the individual for the benefit of the race—so careful of the type is she, so careless of the single life. The sole object of individual elimination, racially considered, is to prevent the unfit individual from leaving offspring to inherit his unfitness, and Nature in her rough-and-ready way achieves this object by simply wiping him out of existence. The same end can be attained, however, by the unfit abstaining from getting unfit offspring and choosing to join the ever-increasing army of the non-marrying. Elimination from the racial standpoint means not having offspring, and all who do not leave offspring are racially eliminated—unrepresented in posterity.

The best way, therefore—indeed, the only way—effectually to raise the racial standard is for the unfit to submit to voluntary elimination and to abstain from getting unfit variations. Not only would it be possible in this way to diminish the tendency to cancer and a host of other fell diseases, but it would also be possible, though some may think it undesirable, to extend the span of life almost indefinitely. I have elsewhere shown that a man does not grow old, as is so often assumed, by wearing out, like his boots. If such were the case he would begin to wear out from the very beginning of his existence, whereas it is precisely in the years of developmental life when most energy is expended that there is least evidence of wearing out, the organism, on the contrary, steadily advancing in efficiency. The period of senility is as much a part of the physiological vital cycle as that of development itself.

I would observe, in conclusion, that I do not advocate any startling measures of reform. The change I have hinted at can only come gradually, but come it must, and who fitter than ourselves to help on the consummation?

Wimpole street, W.

UNIVERSITY OF CAMBRIDGE.—The Examiners for the Final M.B. Examinations have been appointed as follows:—Medicine: Dr. D. B. Lees, Dr. Isambard Owen, Dr. D. MacAlister, and Professor Greenfield. Surgery: Professor Chiene, Professor E. Ward, Mr. Bernard Pitts, and Mr. Golding-Bird.—The Regius Professor of Physic and Dr. W. Collingridge, medical officer of the Port of London, are to represent the University at the Paris Congress of Hygiene and Demography in August.—A course of laboratory work in chemistry, &c., for the D.P.H. examination will be given by Mr. J. E Purvis at the Chemical Laboratory during the ensuing long vacation. The course will be open to practitioners who are not members of the University and it will begin on July 6th.—The Vice-Chancellor, Mr. Chawner, has been elected to hold office for another year.—Mr. Wilberforce of Trinity College has been appointed Lecturer on Experimental Physics in the place of Mr. W. N. Shaw, F.R.S.—The plans for the medical school buildings having been approved by the Senate it is proposed during the summer to obtain specifications and tenders for the erection of the first portion facing Downing-street.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

ADDISON'S DISEASE FOLLOWING ENTERIC FEVER.

BY HAROLD W. EVANS, M.R.C.S. ENG., L.R.C.P. LOND.

ON Feb. 26th of this year I was called in to see a girl, 17 years of age, who said she had felt unwell for 10 days. Her temperature was 103° F. and she complained of a fulness at the lower part of her abdomen. I ordered her to bed on milk diet and found in a day or two that the case was one of enteric fever in the second week, and of moderate severity—i.e., she had from three to four loose stools a day which had the colour of yellow ochre and were occasionally streaked with blood. Typical rose spots appeared in crops. The temperature remained between 101° and 103° till March 10th when it dropped to normal, corresponding to the end of the third week from the time the patient first dated her illness. For the next week all seemed to be going well, the temperature keeping down, the tongue cleaning and becoming moist, and the motions lessening in number and improving both in colour and consistency. The following week, however—i.e., the fourth in which I had attended her and the fifth of the disease—vomiting commenced and occurred two or three times a day and once or twice a night. The vomit was of a greenish colour and of watery consistency, and did not seem to have any connexion with the diet which at that time still consisted of milk, the most marked feature being its persistency and the great difficulty I had to control it. At the time I was greatly puzzled by this symptom and thought it must be due either to irritability of the stomach as a result of the general debility caused by the enteric fever or to a gastric ulcer, though there were no symptoms of the latter, such as pain after food or blood in the vomit. About this time I noticed a marked increase in the pulse rate which made me think that the patient was going to have a relapse, but though I repeatedly took her temperature I never found any rise, nor was there any return of the other symptoms—viz., rose spots or diarrhœa.

One day in the sixth or seventh week when examining the girl's abdomen I noticed a brown discolouration of the skin immediately above the pubes. At the time I did not pay much attention to this point, thinking that as the patient and her surroundings were none of the cleanest it was probably due to the want of soap and water. The following week, however, I noticed this discolouration had increased considerably in extent and tone, and the patient remarked to me what a funny colour she was turning. On closer examination I found this staining to be made up of a number of small brown spots somewhat resembling sun-freckles. The deepest colour was immediately above the pubes, from which it extended nearly up to the umbilicus, gradually fading into the adjacent skin. I found a similar condition around the nipples and in the axillæ. Though I repeatedly examined the mucous membrane of her lips and mouth there was never any staining to be noted.

The further course of the case was one of steady decline. The pulse became weaker and weaker—in fact, for many days it was quite imperceptible at the wrist. The vomiting continued, being some days better, other days worse. There was great emaciation, though this may have been due partly to the enteric fever and partly to the patient's great disinclination to take food. Towards the end very troublesome constipation occurred and in the last week a number of purpuric spots appeared upon the chest and abdomen which showed up in marked contrast to the brown discolouration. The patient gradually sank and died from asthenia on May 19th—i.e., 11 weeks and five days from the time of my first seeing her.

As the patient lived at a distance of seven and a half miles from my house I was unable to visit and observe her as closely as I should have liked. I was not able to obtain a

necropsy to verify my diagnosis, though with the three cardinal symptoms so well marked I have little doubt in my mind that it was a true case of Addison's disease.

I should like to have the opinion of my professional brethren on the questions: Was there any direct connexion between the last and first diseases, or was it simply the case of a body debilitated by a wasting disease becoming a suitable nidus for the invasion of the bacillus tuberculosis, if, as seems generally to be acknowledged, that be the cause of Addison's disease? I examined the patient thoroughly on more than one occasion but was never able to find any tuberculous mischief elsewhere.

Littleport.

NOTE ON A CASE OF FAILURE OF RESPIRATION UNDER ANÆSTHESIA.

BY FRANK E. MARSHALL, M.B., CH.B. VICT., L.S.A.,
ANÆSTHETIST (PRO TEM.) TO THE ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

IN a recent issue of THE LANCET[1] there was a report of a meeting of the Society of Anæsthetists at which three cases of Failure of Respiration under Anæsthesia were reported by Mr. Carter Braine. As I have recently had a case somewhat on the same lines I think an account of it may be of interest to anæsthetists generally.

The patient was a well-built lad, aged 18 years, upon whom osteotomy of the neck of the femur for old fracture and subsequent ankylosed hip was being performed. The first stage and second stage passed off normally, except that perhaps the second stage was rather more prolonged and more violent than is usually seen in patients of this class. The operation had been in progress about 10 minutes, nearly an ounce of chloroform having been used in an ordinary open inhaler, when the patient suddenly stopped breathing with his pupils widely dilated and not reacting to light. The heart continued beating, as far as one could judge, quite normally. The tongue was pulled out and the jaw was jerked forwards and upwards several times with no result. The patient's head and the upper part of the trunk were hung over the edge of the operating-couch and artificial respiration was commenced, air entering and leaving the chest quite naturally. No attempt, however, was made by the patient to continue breathing. His colour remained good, though slightly pale. The pulse was very fair, but the pupils still kept widely dilated. Owing to the apparently good condition of the circulatory functions the operation was continued and completed, 10 minutes being thus occupied, during which time the above-mentioned position was maintained and artificial respiration was persisted in. After about 10 minutes the patient's breathing recommenced just as suddenly as it had stopped, the pupils returned to their normal condition, and after another two minutes he began to regain consciousness. The after events were quite normal. At no time was there any sign of approaching vomiting—the patient, indeed, did not vomit at any time after the anæsthesia. The lower jaw, I may mention, was quite flaccid; in fact, it had dropped. The heart sounds were quite normal and there was no albuminuria. Curiously enough, a week later the same patient was again operated upon, and this time a wedge-shaped piece of bone was removed from the neck and great trochanter of the femur. The operation on this last occasion occupied three-quarters of an hour, chloroform being again administered, and at no time did anything unusual occur.

To me this case appears as a true paralysis of the respiratory centre, the circulatory centre being uninterfered with; the chloroform which was used (Duncan and Flockhart's) being above suspicion.

Liverpool.

[1] THE LANCET, May 26th, 1900, p. 1518.

NEW MEDICAL FACULTY IN RUSSIA.—The University of Odessa has hitherto lacked a medical faculty. The necessary buildings have been already partly erected and a commencement will be made next session. There will be at first seven clinics with 195 beds, 14 ordinary and nine extraordinary professors, and nine prosectors and six assistant prosectors. The first dean of the medical faculty will be Professor Podvyzotski.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

BIRKENHEAD AND WIRRAL CHILDREN'S HOSPITAL.

A CASE OF OMPHALITIS RESULTING IN ULCERATION AT THE UMBILICUS; CLOSURE OF ULCER BY A PLASTIC OPERATION; RECOVERY, WITH A FIRM CICATRIX.

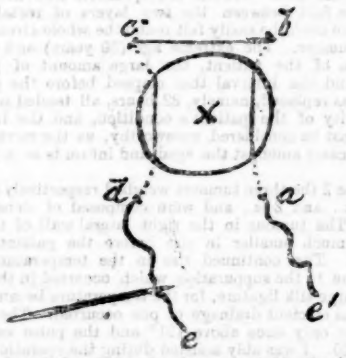
(Under the care of Dr. J. PINKERTON.)

FOR the notes of the case we are indebted to Mr. William Herbert, late house surgeon.

A female infant, aged one month, was on April 15th, 1898, taken by the mother to the Birkenhead and Wirral Children's Hospital for treatment on account of an inflammation of the umbilicus. The mother stated that the inflammation had been present for about a fortnight. The infant, who was born at the eighth month, was small and ill-nourished. On examination there was found to be an extensive inflammation around the umbilicus, the margin of the inflammatory zone being about two inches from the centre. The skin over this area was very red but not boggy. There was no discharge from the umbilicus, nor could a sinus be detected. A dressing of equal parts of saturated boric acid lotion and carbolic lotion (1 in 40) was prescribed, to be applied four times a day. A quarter of a grain of hydrargyrum cum creta was prescribed for internal administration every night. The child was being hand-fed and an ounce of lime water was added to each bottle of diluted milk. When seen a week after this the redness had somewhat subsided. A purulent discharge, however, had made its appearance at the umbilicus; the treatment was continued. On the 30th the discharge of pus continued, but the zone of redness had disappeared and the general health of the infant had improved. Boric acid lotion was prescribed and the grey powder was ordered to be taken every other night. The patient was not again seen till May 17th. The mother then said that on the 15th a "core" had come away from the umbilicus. On inspection a circular ulcer with roughened edges occupied the site of the umbilicus. It was about one-third of an inch in diameter and involved all the soft structures of the abdominal wall. Forming, as it were, the floor to this resulting cavity was a glistening structure which was found to be the peritoneum; but it had escaped, as it showed no inflammatory change. There was no bulging at the opening. The infant looked better. The powders were stopped.

On May 25th (with the consent of Dr. Pinkerton, the honorary medical officer) Mr. William Herbert performed a plastic operation with a view to close the ulcer as the general health of the infant seemed to permit this. No anæsthetic was given. First the edge of the ulcer was pared all round with a hernia bistoury. This instrument was chosen on account of its blunt end which could not injure the peritoneum. A clean, raw margin was obtained, as little healthy tissue as possible being removed. A curved needle, threaded with medium-sized catgut, was pushed through the abdominal wall (inferior right hand corner) about an eighth of an inch from the freshened edge (see figure, *a*). It passed through the whole thickness of the parietes, carrying the suture across the floor of the ulcer, again through the parietes, to emerge at the superior right hand corner (*b*). The suture then curved to the corresponding left upper corner and was inserted there; again carried across the floor it emerged at the left lower angle. The two ends (*c*, *c*) were then tied; good apposition was thus obtained with a certain amount of puckering. A dry dressing (double cyanide gauze) was applied and a flannelette bandage was firmly bound over this. On May 31st the suture was removed and, except for a slight superficial portion union was complete. Boric acid in powder was dusted on the wound,

covered with dry lint, and the bandage was re-applied. On June 2nd union by first intention was complete. The child was last seen at the beginning of July. The cicatrix then appeared to be very firm and the flannelette binder was



The freshened edge of the ulcer is represented by the circle. *x*, Floor of the ulcer lined by peritoneum. *a*, *b*, *c*, *d* indicate the course of the needle carrying the suture. *e*, *e'*, Free ends of suture ready for tying.

discontinued. The infant's general condition was good and there was no trace of any bulging at the cicatrix.

Remarks by Mr. HERBERT.—Little is said in the text-books both on surgery and on children's diseases about inflammation at the umbilicus and an unfavourable prognosis is given. The inflammation runs much the same course as elsewhere and is doubtless caused by septic organisms. In the above case the condition was no doubt a septic one, the resulting ulceration being dependent upon its severity. It would be interesting to have had more particulars about the "core" which the mother said had come away previously to the ulceration manifesting itself. Three features in the case, however, seem to be noteworthy. 1. The absence of any bulging at the site of the ulcer. This was doubtless due to the fibrous ring of the umbilicus being left more or less intact and capable of offering sufficient resistance to internal pressure. 2. The complete peeling off of the structures superficial to the peritoneum, leaving this membrane to form the floor of the resulting cavity. 3. The absence of toxic symptoms during the free employment of both carbolic and boric solutions, both of which have given rise to unpleasant symptoms in their use in infants and young children. I am indebted to Dr. Pinkerton for permission to publish this case.

LUCEA HOSPITAL, JAMAICA.

A CASE OF PROLAPSE OF THE RECTUM AND A CASE OF FIBROIDS OF THE UTERUS.

(Under the care of Dr. E. R. C. EARLE.)

THE case of prolapse of the rectum and sigmoid flexure described below may be looked upon as really an example of intussusception, for the upper part of the rectum had become invaginated into the lower. Many cases of prolapse commence in this manner, but so long as there is a sulcus between the protruding mass and the anus the case is one of intussusception. A case in many respects resembling the one appearing below was recorded by Dr. C. B. Kelsey,[1] though the intussusception had existed for a longer time. The second of Dr. Earle's cases illustrates well the fact that of all forms of uterine fibroid the most easily removed is the pedunculated subperitoneal variety, and with modern asepsis the risk to life is but slight. In this case the size of the tumours was very great and would have justified even more severe measures.

CASE 1. *Prolapse of the rectum with invagination of the sigmoid flexure; recovery.*—A feeble old coloured man, 89 years of age, was admitted into Lucea Hospital at 11.30 A.M. on Oct. 22nd, 1899, with a large tumour protruding from the anus. He stated that at 2 P.M. on the previous day, whilst straining at stool, he felt the bowel come down and that it had remained in that condition ever since. On examination it was seen that a large tumour, eight inches in length and between two and a half and three inches in diameter, protruded from the anus. The tumour consisted of prolapsed rectum and sigmoid flexure. It was conical in shape and slightly smaller at the lower end than at the middle; at the lower end there was an opening similar to a large os uteri, up which the finger could be passed. The surface of the tumour consisted of mucous membrane with concentric sulci; it was dark red in colour and much congested and swollen, with small, dark, submucous hæmorrhages. It was not strangulated at the anus and there was no odour of gangrene. The anus was lax and the finger could with ease be passed up for two or three inches between the sphincter and prolapsed bowel all round the tumour. The patient complained of severe pain in the back but not in the tumour; he was very old, poorly nourished, and very weak.

At 12 noon he was put under chloroform and the tumour, which was thoroughly cleaned and warmed, was replaced gradually and slowly without any great difficulty, owing to the lax condition of the anus. There was a slight laceration in the posterior wall of the anus. Powdered tannic acid and a morphia suppository were put in the rectum and a perineal pad and band were applied. Hot-water bottles were placed at either side and the hips were raised on a pillow.

At 6 P.M. his condition was fairly good. He had slept a little and was in no great pain. Five minims of liquor opii sedativus were given after the operation and one and a half ounces of whisky in water. He passed a good night. On Oct. 23rd, early in the morning, a stool was passed containing serous bloody fluid and small blood-clots. The bowel was washed out with boric acid lotion and a five-grain suppository of tannic acid was inserted. The patient was comfortable and was stronger. At 5 P.M., after an enema of boric acid lotion, no fæcal matter came away; the fluid was dark-coloured and was mixed with shreds of mucous membrane. The tannic acid suppository was repeated. The patient rested well during the night. There was no action of the bowels; the pain in the back was relieved, but he had pain in the left shoulder and front of the chest. At 5 P.M. an enema was administered; the stool was very offensive. The suppository was given as before. On the 25th he had slept well; the former pain was relieved, but he now had pain in the left hip. No stool had been passed during the night. The enema and suppository were administered morning and evening as before. On the 26th he had slept well. The bowels had acted once during the night; the stool was offensive. The treatment was continued. On the 27th the patient passed three liquid stools, on the 28th and 29th two, and on the 30th and 31st one each day. There were no signs of prolapse and there was no pain. On the 31st he became very weak and low and had much difficulty in speaking, but he became stronger on Nov. 1st. He was discharged from the hospital on the 5th.

CASE 2. *Large fibroids of the uterus; removal; recovery.*—A coloured woman, aged 40 years, was admitted into Lucea Hospital on June 1st, 1899, complaining of great distension of the abdomen which had gradually increased during the previous three years. On examination the abdomen was found to be much distended. There was a large moveable tumour felt in the front and right side of the abdomen, passing into the right lumbar region and upwards under the liver, filling the right half of the abdomen; the tumour was firm, elastic, and freely moveable. A second tumour similar in character, freely moveable, but of smaller size, was felt in the left lumbar region. By vaginal examination a large firm elastic tumour was felt, filling the right lateral fornix of the vagina, the cervix being small and displaced towards the left side. The tumour appeared to be situated in the right lateral wall of the uterus. As the patient was in poor health she was kept in the hospital for three weeks prior to operation in order that her physical condition might be improved.

On June 21st, at 8 A.M., chloroform was administered. A dose of castor-oil had been given the night before and a rectal enema and vaginal douche had been administered early in the morning. The abdomen had been thoroughly cleaned and asepticised and the pubes shaved on the previous day and the urine had been drawn off just before the operation. An incision was made in the mid-line from a point two inches below the umbilicus to about one inch above the symphysis and the abdominal cavity was opened; some ascitic fluid escaped. The tumours were seen to be dense, solid fibroids attached to the uterine wall by

[1] The Post-Graduate, New York, August, 1896.

short pedicles. The incision had to be enlarged in an upward direction to a point two inches above the umbilicus before the large tumour could be got out of the abdominal cavity. Its surface was covered with apron-like folds of peritoneal membrane through which coursed tortuous vessels of large size, and the omentum was adherent to it in several places. The large vessels were ligatured and cut, the adhesion bands were torn through, and the pedicle, which was about one inch long and as thick as a finger, was ligatured close to the uterus and cut and the tumour was removed. The smaller tumour on the left side was removed in a similar manner. A third tumour, of about the size of a fowl's egg, was found attached by a short pedicle to the posterior wall of the uterus under and behind the large tumour, and this was also ligatured and removed. A fourth large fibroid tumour was now clearly defined, of about the size of a man's fist, in the right half of the pelvis, apparently arising from and in the right lateral wall of the uterus, and situated between the folds of the broad ligament. It was found to be impossible to remove this large sessile tumour without also removing the uterus, and as it was not deemed to be justifiable to increase the patient's risk it was left *in situ*. Bleeding from the stump of the pedicle of the large tumour gave trouble owing to the ligature having slipped from retraction, but it was eventually controlled by stout silk ligatures. The abdominal cavity was wiped out with sponges but very little blood had escaped into it. The wound was then closed by approximating the edges of the peritoneum with a continuous fine silk suture and the abdominal wall by deep and superficial silk sutures. No drainage-tube was inserted. Tension was avoided by long strips of plaster from loin to loin. A morphia suppository was administered and she was put into bed between blankets with hot-water bottles on each side. The operation was completed and the patient put into bed at 10 A.M.

The patient was only allowed to have small quantities of warm water at intervals until 10 P.M., when milk and barley-water were given every two hours. The urine was drawn off by catheter every four hours. On the 22nd, 23rd, and 24th a vaginal douche was given each evening. Before noon each day the temperature remained normal but each afternoon and evening it rose to between 100·4° and 100·8°F., the pulse remaining at 74. The patient remained comfortable and cheerful. On the evening of the 24th small repeated doses of sulphate of magnesia were given and the diet was more generous. On the 25th the morning temperature was 101·2° and the pulse was 76. The bowels acted, a copious loose stool with much flatus being passed, the patient sleeping well afterwards. The urine was clear. The wound was dressed and was healing well. At 4 P.M. a slight, bloody, offensive discharge came from the vagina; there was no pain. The temperature was still above 101°. On the 26th the morning temperature was 99·6° and the pulse was 72. The patient passed a good stool without pain. There was a bloody vaginal discharge. The evening temperature was 101·4° and the pulse was 74. On the 27th the morning temperature was 100·4° and the pulse was 72. A copious bloody discharge was still present—bright arterial blood; there was no pain. The patient felt well. The evening temperature was 101·6° and the pulse was 74. On the 28th the morning temperature was 100·8° and the pulse was 74. The hæmorrhage from the vagina was less in quantity. An enema was given and a slight amount of flatus was passed. The evening temperature was 101·2° and the pulse was 70. Ice was applied locally in the vagina. On the 29th the morning temperature was 99° and the pulse was 70. At 4 A.M. a sero-purulent discharge came from the lower end of the wound and soaked the dressings. There was a firm lump felt in the uterine region. The lower stitches were removed to allow free exit for discharge. A probe inserted in the sinus passed upwards and backwards in the mid-line. The hæmorrhage from the vagina was much less. The evening temperature was 99·2° and the pulse was 70. On the 30th the morning temperature was 98·2° and the pulse was 70. Sweet pus was still discharging from the sinus. The lump in the uterine region was smaller. The temperature was normal all day. The vaginal discharge had almost ceased. On July 1st all the sutures were taken from the wound except three deep middle ones. After this the discharge gradually ceased and the temperature and the pulse remained normal. The patient convalesced rapidly, made an uninterrupted recovery, and was discharged from the hospital on August 13th.

Remarks by Dr. EARLE.—Case 1 was undoubtedly one of invagination of the sigmoid portion of the colon into the rectum, with prolapse of the invaginated bowel through the anus. The lower two or three inches of the rectum were not prolapsed, as was proved by the insertion of the finger through the anus between the sphincter and the tumour, when the fold between the two layers of rectal mucous membrane could be easily felt round the whole circumference of the tumour. The extreme age (89 years) and the weak condition of the patient, the large amount of prolapsed bowel, and the interval that elapsed before the prolapsed bowel was replaced, namely, 22 hours, all tended to increase the gravity of the patient's condition, and the favourable result must be considered noteworthy, as the mortality rate in these cases amongst the aged and infirm is as a rule very high.

In Case 2 the three tumours weighed respectively 6 lb. 6 oz., 2 lb. 2 oz., and 2 oz., and were composed of dense fibrous tissue. The tumour in the right lateral wall of the uterus became much smaller in size before the patient left the hospital. The continued rise in the temperature was, I think, due to the suppuration which occurred in the locality of the large silk ligature, for the temperature became normal as soon as efficient drainage of pus occurred. The temperature rose only once above 101° and the pulse never went beyond 80. I was ably assisted during the operation by Dr. C. M. Phillips of Philadelphia and Sister Annie Douglass of St. Bartholomew's Hospital, to whom I desire to convey my thanks for their valuable aid.

Medical Societies.

HUNTERIAN SOCIETY.

Exhibition of Cases.

A CLINICAL meeting of this society was held on April 11th at the London Institution, the President, Dr. DUNDAS GRANT, being in the chair.

Dr. BUTLER HARRIS showed a case for Diagnosis—an infant with a Sublingual Swelling.—Dr. F. J. SMITH said that he had no doubt that the lump was some form of developmental error, most probably a persistent thyroglossal duct. He thought that this was so because of its position in the middle line of the body and from the softish, cystic feeling of the lump. For treatment he advised waiting till the child was a little (a year or more) older and then radical excision.—Dr. RAWES considered it to be a case of venous nævus and he based his diagnosis upon the presence of distended veins in the neighbourhood and upon the fact that the tumour could be so easily compressed between the forefingers.—Mr. J. H. TARGETT suggested that it was a nævoid growth.

Sir HUGH BEEVOR showed a case of Hemianopsia occurring in a man 49 years of age. In September, 1897, he had a sudden attack which left him with much loss of sensation on the left side, slight left paralysis, and impaired intelligence. In November, 1897, he was under Dr. Ferrier's care and the record then made was to the effect that his family history had been good and that he had had no ailment but syphilis 17 years before. A few months previously he had noticed a sudden loss of sensation on the left side and his eyes were so affected that in his work he used to spoil material by not cutting it properly; he had noticed little alteration since the attack commenced; the loss of power in his arm and leg had been increasing; he had no loss of consciousness at the time of the attack and had no headache or vomiting. He was a well-built man, looking stupid and listless. Tests of sensation gave the following results: the taste and smell were normal; the hearing was less acute on the left side after removing the cerumen; vision—hemianopsia, left, complete to middle line; analgesia of the left arm and leg; anæsthesia of the face, arm, and leg; and loss of muscular sense in the arm and leg. He walked with a slight stagger and a tendency to fall backwards and to the right. The grasp of his left hand showed loss of power. Ankle-clonus and exaggerated knee-jerk were present. Ophthalmoscopic examination was normal. Cranial tenderness on deep pressure was elicited over the right parietal eminence. In February, 1900, he was attacked

with vomiting and left-sided convulsions and with conjugate deviation of the eyes to the left, followed by paralysis of the left side and of the right external rectus oculi; for a few days he was semi-conscious. In a few weeks the ocular movements became normal and the patient's condition seemed little altered by his recent attack.—Dr. F. J. SMITH said that from the absence of neuritis and from the stationary nature of the symptoms for over two years the lesion was probably a softening, either thrombic or embolic. He thought a tumour was ruled out by these facts. He thought that the lesion must be more central than in the optic tract. The staggering in the gait might possibly be due to hemi-paresis of sensation leading to incoördination, and not necessarily to subjective unsteadiness. He was inclined to place the lesion at the hinder part of the posterior limb of the capsule (the sensory crossway), believing that a single lesion here might cause all the symptoms, and if possible he would prefer to ascribe the symptoms to one lesion rather than to multiple lesions. If the gait were ascribed to cerebellar influence he thought that the hemianopsia would require a second focus of destruction to explain it, as it was so very complete.—Sir HUGH BEEVOR said that from the recent attack it seemed evident that a tumour was present.

Dr. F. J. SMITH showed, by permission of Dr. F. WARNER, a case for which he thought a provisional diagnosis of Friedreich's Ataxy was most likely. The patient was a girl, 14 years of age, the eldest of four children, and was quite well till she reached the age of seven years when she had measles. After the measles she was noticed to have twitching of the limbs, which was diagnosed as chorea. With this twitching there was noticed a difficulty in walking and this, it was said, had got steadily worse. In fact, at the end of 1899 she was still thought to have chorea. Coördination was markedly interfered with in all her limbs; she could not stand alone, much less walk, even with her eyes open; with the hands she could pick up small objects fairly naturally and easily so long as her eyes were open, but on closing the eyes she completely lost the power of touching her nose with the finger and could not locate her limbs at all. There were no knee-jerks and no ankle clonus; on testing the plantar reflex the big toe was first extended. The cranial nerves seemed unaffected, though her intellectual faculties were somewhat deficient.—Mr. TARGETT called attention to the marked degree of scoliosis present in this case and the resemblance which it bore to the trophic scoliosis of syringomyelia. In the latter affection scoliosis occurred in more than half the cases. Pes cavus was present in both disorders, though it was more characteristic of Friedreich's ataxy. Neuropathic arthritis, such as was well known in connexion with locomotor ataxy and syringomyelia, had not been met with in Friedreich's ataxy.

THE PRESIDENT showed a case of Syphilitic Lesion of the Facial Auditory and Spinal Accessory Nerves. The patient, a man, 41 years of age, had come under Dr. Grant's care in June, 1899, on account of extreme deafness in the left ear. The left side of the face was almost completely paralysed as was also the left half of the palate and the left vocal cord. He had, therefore, a lesion involving the facial, the auditory, and the spinal accessory nerves simultaneously. In July, 1890, he fell down on his way to his work and was unconscious for some three days, and on recovery was found to have some weakness on the right side of the body. Two years later he had a second attack which developed suddenly in the middle of the night and left him with paralysis of the left side of the face, complete deafness in the left ear, hoarseness of voice and giddiness. The history of acquired syphilis was elicited and there seemed little doubt that the combination of nervous conditions was due to a syphilitic lesion either in the medulla oblongata or external to it at the point of exit of the nerve mentioned.

THE PRESIDENT also showed a case of Rhinoscleroma, occurring in a woman, 26 years of age. A microscopic preparation of a portion of the tissue when removed was made by Mr. Wingrave, and Dr. St. George Reid made a cultivation which, he considered, answered to that typical of rhinoscleroma, as showing the capsuled bacillus.

Dr. W. H. KELSON showed a case of Lupus of the Nose, Palate, and Tongue.

Dr. J. H. SEQUEIRA showed a case of Birth Palsy occurring in a male infant, aged four months, the first child of healthy parents. There was no history of syphilis. The labour was apparently an easy one, the mother being attended by a midwife. It was stated that the child was born "head first," and so far as could be gathered no undue efforts were necessary for delivery. Immediately after birth it was noticed that the child's fingers were bent into the palm and that the left elbow could not be straightened.

Dr. J. H. SEQUEIRA also showed a case of Lupus Erythematosus occurring in a woman, aged 21 years, who had suffered from the disease for two years. The eruption began as two symmetrical patches just in front of each ear and gradually spread on to the cheeks.

Facilities have been provided for Fellows to dine together before the meetings at an hotel near the London Institution. This is found to be a great convenience to Fellows living at a distance and is quite in accordance with the social traditions of the "Old Hunterians."

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.

The Hill Stations of India as Health Resorts.

THE annual meeting of this society was held on May 30th, when the members dined together. A conversazione was subsequently held at 20, Hanover-square with a reception by the President, Dr. J. IVOR MURRAY.

Sir JOSEPH FAYRER, Bart., F.R.S., K.C.S.I., gave an address on the Hill Stations of India as Health Resorts. He wished, he said, to consider these stations not merely in reference to the treatment of disease and convalescence but also as resorts in which the European might preserve his health and avoid the physical deterioration which inevitably resulted from protracted residence in the plains; places indeed, where it seemed even possible that he might take root, thrive, and propagate his race—a subject of ever-widening interest to our rapidly increasing population. For this there were grounds of belief that the prospects of success were not altogether unfavourable, though so far no conclusive proof of it was forthcoming. Past history, however, showed that colonisation by the unmixed European races in the plains of India was impracticable. In the very rare instances in which the third generation had been reached it had evidently attained its utmost desirable limits, whilst of the Portuguese who preceded us no descendant unalloyed by native blood could be said to exist. The physiographic characters of British India were next described, there being three natural divisions: (1) the Himalayan and sub-Himalayan region; (2) the Indo-Gangetic basin and deltas; and (3) the Peninsula proper formed by the elevated plateau of the Deccan bounded on each side by the Ghauts and the littorals between them and the ocean. In these areas there were very many varieties of climate which depended upon the latitude, elevation, and soil. There were three seasons in the year—the hot season, which extended from March to June; the rainy season, which extended from July to October; and the cold season, which extended from November to March. These seasons varied considerably according to the latitude and elevation. They were also greatly influenced by the monsoons or rain-bearing winds. The monsoons did a great deal to determine the conditions of climate and health as well as the production of food. They resulted from the northern flow of air bearing moisture from the ocean and they were more or less deflected or modified by the physical conditions of the country over which they passed. The south-west monsoon was the great carrier of rain in India, which it deposited upon the Western Ghauts, where it first impinged, and where the greatest amount fell. Then passing over extensive tracts of desert land it came in contact with the Himalayas where a large fall took place. Every variety of climate, Sir James Fayrer said, could be met with in India. Malaria was widespread in the plains and here no Europeans could exist for any continuous length of time, but there were many hill stations where they could live, and many others which had never been fully explored or taken advantage of, and he believed that such an investigation as this would form a worthy object for this society, the opinion of which would carry much weight. There were, for instance, the elevated plateaux of the Khasia, and the Syntea Hills between Bengal and Assam, which were at a height favourable to the European constitution, and the range of high country parallel to the Ganges presented fine table-lands at Sohagpore, the elevation of which had been estimated at from 3000 to 5000 feet. Both of these were favourably

spoken of by the late Inspector-General MacLelland. The district of Ramghur in the Saugor and Nerbudda territories and other regions were also mentioned as being only imperfectly explored. Although much had been done since Dr. MacLelland wrote there was good reason to believe that in the vast mountain ranges and table-lands of India the physical and climatic conditions necessary for the preservation of health, and perhaps even for the permanent colonisation of the European, would be found to exist to a much greater extent than had hitherto been supposed. As illustrative of the extra-tropical (i.e., the Himalayan) districts Darjeeling, Naini Tal, Simla, and Mount Abu were described, and as examples of the tropical districts Mahableshwar, Matheran, and the Nilgiris. Only a brief account of these could be given, but it touched the fringe of a large subject, one which might with advantage be investigated by the British Balneological and Climatological Society.—The PRESIDENT, who spoke in very high terms of the address (to which, he said, those present had listened with much pleasure) proposed a vote of thanks to Sir Joseph Fayrer.—This was seconded by Dr. ROBERT BARNES and carried by acclamation.

A collection of meteorological instruments was shown by Messrs. Negretti and Zambra, surgical instruments were exhibited by Messrs. Allen and Hanburys, drugs by Messrs. Oppenheimer, books by Mr. H. K Lewis, Mr. H. Kimpton, and Mr. Bale, and dietetic preparations by Messrs. Van Abbott and Sons. Excellent music was provided by the Leoni Ladies' Quintette.

ISLINGTON MEDICAL SOCIETY.—A meeting of this society was held on May 15th, at 25, Highbury-place.—Dr. Ford Anderson opened a discussion on the subject of Placenta Prævia, pointing out how dangerous this variety of complex labour was to the mother and especially to the child, the maternal mortality being 5 per cent. and the infantile mortality 90 per cent.; the maternal mortality, however, was one-third less in cases of partial placenta prævia than in cases of central placenta prævia (Glasgow Maternity Hospital). The appalling infantile mortality was largely due to prematurity, but where it was not so there was hope that it might be reduced by better treatment. The pathology of placenta prævia was described as were the peculiarities of the lower uterine segment which indicated that it was useful as a passage only, not possessing contractile power and therefore fitly called the "dangerous placental seat." The diagnostic signs of placenta prævia were then described and their importance as a prelude to treatment was pointed out. Hæmorrhage was generally the first sign and suspicion was aroused by its apparently causeless occurrence, often when the patient was lying down and sometimes when she was asleep. The history of a case of placenta prævia might differ in no respect from any other case till the middle of the ninth month of pregnancy, when a hæmorrhage occurred which was really unavoidable and was generally large and sometimes fatal. If this late appearance of hæmorrhage were the invariable rule there would not be so much divergence with regard to treatment. More frequently there were warning hæmorrhages in the course of pregnancy from accidental separation of the placenta and many miscarriages were probably due to this cause. Vaginal examination showed bogginess of the lower uterine segment and absence of ballottement; if the placenta were felt that was pathognomonic. Abdominal palpation was most useful to those who practised palpation in all cases. The method as described by Pinard and others was best and with practice there was no difficulty in diagnosing the presence of the soft placenta below the head in the pelvic excavation. In the treatment it had been the practice to temporise till the child was viable, that is, till the seventh month; and perhaps where the patient could be kept under constant skilled supervision in a hospital this was permissible if the hæmorrhages were neither too frequent nor too great, but, considering the small chance to the child and the great risk to the mother from waiting, it was better in a case of early pregnancy with diagnostic signs of placenta prævia to empty the uterus as quickly as possible compatible with safety. This was certainly the best course for the patient as well as the practitioner. In general practice the ordeal of waiting was very trying, and no one who had gone through it once would care to do so again. The details of treatment as generally applied were next described—that is to say, bi-polar version preceded in cases of contracted cervix by puncture of the membranes and the use of the cervical plug; but, contrasted with the traditional methods, the Champetier de Ribes bag was eulogised as an invention which could be used at almost any stage of delivery in placenta prævia. It was an inverted cone when introduced, the apex being at the os internum and it formed a gentle and uniform dilator of the os uteri; it imitated the bag of the membranes, and the base of the larger Champetier de Ribes bag was of such a size that when it had passed through the os delivery could be completed. By traction on the pipe the uterine sinuses could be compressed and, if necessary, the traction could be maintained for many hours by a light weight. The introduction into the amniotic sac, after puncturing the membranes, by the special forceps, was always easy, even when the os was dilated only to the size of little more than one finger, and the bag should be previously scrubbed with soap-and-water and a nailbrush and should be dipped in carbolic solution (1 in 20). This was the rival treatment to sponge tents and even to turning. Dr. Anderson referred to two cases in which he had used the bag. In one the placenta was marginal and when he was called in the night he found the patient flooding freely and the os uteri admitting little more than one finger. He introduced the bag immediately after rupturing the membranes, distending it with water by means of a syringe, and by using ergot and a bandage and by traction on the pipe he controlled the hæmorrhage for several hours when the bag was expelled, and as the child lay transversely he turned and delivered. It seemed all so simple compared to the old treatment. Referring to the objections raised to the use of the bag he remarked that in order to avoid sepsis it was well to begin by removing clots at the cervix by a douche. As the bag was introduced into the amniotic sac it took the place of water which escaped and there was no recorded case of rupture of the uterus. It was well, however, to ascertain previously the capacity of the bag and to fill the bag slowly, stopping during uterine contractions. There might be some risk of rupture in induction of premature labour, as the membranes were not previously ruptured, but here a small-sized bag might be used in the first instance. There was no doubt that displacement of the presenting head might be caused by the bag, but this could be rectified on withdrawal, if not before. Already statistics showed an improvement as regards infantile mortality—which in Dr. G. F. Blacker's collected cases was 54 per cent.—with no increased risk to the mother, and Dr. Anderson concluded by expressing his belief that this encouraging result would be maintained and improved as the value of the Champetier de Ribes bag became more widely recognised.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—The annual meeting of this society was held on May 24th when the following officers were elected for the ensuing year:—President: Dr. A. J. Harrison. Vice-Presidents: Dr. H. A. G. Brooke, Mr. Alfred Cooper, Dr. H. Radcliffe-Crocker, Sir George Duffey, Dr. Robert Liveing, Dr. J. F. Payne, and Dr. J. H. Stowers. Council: Dr. P. S. Abraham, Dr. Alfred Eddowes, Dr. W. T. Freeman, Mr. Hope Grant, Dr. A. J. Hall, Mr. T. J. Hitchins, Dr. H. H. Phillips-Conn, Dr. Leslie Roberts, Dr. Arthur Shillitoe, Dr. R. Travers Smith, Dr. F. Rufenacht Walters, and Mr. Campbell Williams. Treasurer: Mr. George Pernet. Honorary secretaries: Dr. C. Herbert Thompson and Dr. E. Graham Little.—Clinical cases were shown by Dr. Stowers, Dr. Abraham, Dr. Eddowes, and Dr. Freeman.—The President read an inaugural address on the subject of Erythema Nodosum. His experience had caused him to question its supposed causal connexion with acute rheumatism.—Mr. W. Anderson read a paper on the Chief Constitutional and Local Conditions Associated with Seborrhœa. Seborrhœa oleosa was a physiological condition giving rise to disease only in so far as the increased secretion offered a nidus for bacteria. Coronal baldness was usually due not to seborrhœa or parasitic invasion but to senile change. Alopecia areata was not in his experience associated with seborrhœa. Seborrhœa sicca was an inflammatory disease due to parasitic invasion; the baldness in such cases was usually in the first instance temporal. Seborrhea sicca favoured the development of other diseases, such as acne vulgaris and rosacea, seborrhœic dermatitis, lupus erythematosus, pityriasis rubra; and influenced the distribution of other affections, such as lichen circinatus.—The President, Dr. Abraham, Dr. Eddowes, Dr. Stephen Mackenzie, Dr. Radcliffe-Crocker, Mr. Pernet, and Dr. W. B. Warde

joined in the discussion.—Numerous drawings and photographs were exhibited, notably a collection of drawings shown by Dr. Radcliffe-Crocker and a series of photographs by Dr. Arthur Hall.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—A clinical meeting of this society was held on June 1st, Dr. J. B. Ball, President, being in the chair.—A case of Retro-peritoneal Abscess was shown by Mr. Stephen Paget.—A case of Myxœdema in a Child, aged five and a half years, illustrated by three photographs, was shown by Dr. Leonard Guthrie. (The case was discussed by the President, Mr. McAdam Eccles, Mr. George Pernet, Mr. Rickard Lloyd, and Dr. P. S. Abraham, and Dr. Guthrie replied.)—Mr. L. A. Bidwell showed a case of Arthrectomy of the Elbow, and remarks were made upon it by Mr. McAdam Eccles.—Mr. McAdam Eccles showed: (1) Cases illustrating Swellings in the Digits—(*a*) Tuberculous Enlargement of the First Phalanx of the Thumb and (*b*) a Cystic Tumour of the Middle Finger; and (2) cases of Injuries about the Elbow-joint—(*a*) a case of Separation of the Lower Epiphysis of the Humerus and (*b*) a case of Fracture of the Olecranon. Skiagrams of all these cases were shown by Dr. F. H. Low and remarks were made upon them by Mr. Bidwell and Dr. A. H. W. Clemow. Mr. Eccles replied.—Dr. Abraham and the President showed a case of Tuberculous Disease of the Skin and Mucous Membranes.—Dr. Abraham also showed a case of Acute Erythematous Lupus.—The cases were discussed by Mr. Pernet, Mr. Bidwell, and Mr. Rickard Lloyd. Dr. Abraham replied.—Mr. Pernet showed Sections of Leprous Nodules containing Bacilli.

Reviews and Notices of Books.

Archives of Neurology and Psycho-pathology. Volume II. Nos. 3 and 4. 1899. Issued from the New York State Hospitals Press at Utica, New York, March, 1900. Royal 8vo, pp. 265 with 16 Plates and several Illustrations in the text. Price $3.00.

THE present volume contains a number of papers dealing with various subjects of interest to the alienist and neurologist. The scope of the general ground covered is wide, extending from such matters as embryo-chemical studies on the developing egg to clinical studies in epilepsy and cerebral palsies. Dr. L. Pierce Clark, Assistant Physician to the Craig Colony for Epileptics, New York, contributes three papers comprising a series of Clinical and Pathological Studies in Epilepsy. The first in the series deals with the subject of Exhaustion-Paralysis in Epilepsy, and after a brief historical sketch there follows a discussion of the various hypotheses and theories of exhaustion-paralysis together with illustrative cases from personal study and from medical literature. The second and third papers deal respectively with the comparatively rare association of Paramyoclonus Multiplex and Epilepsy and the still rarer clinical phenomenon the Hypertrophic Form of Infantile Cerebral Palsy. Several of the cases of exhaustion-paralysis have yielded opportunity for study after death by anatomico-pathological methods. Dr. Clark's papers are a valuable contribution to the study of the causation and sequelæ of epilepsy and much interesting information is brought together in his three articles. The critical digest of cases in the form of abstracts from the literature of the subject must have involved much labour and will be of great value for reference. 47 illustrations in the text and five photographic plates accompany the paper on exhaustion-paralysis. The next two papers on Paramyoclonus Multiplex associated with Epilepsy and on Hypertrophic Infantile Cerebral Palsy and Phocomelos associated with Epilepsy have a more limited interest, but both show the same excellent qualities of lucidity, fulness of information, and excellence of illustrations and plates characteristic of the first paper.

Dr. P. A. Levene and Dr. I. Levin supply a paper on the Absorption of Proteids based on work at the Physiological Laboratory of Columbia University, New York. As regards digested proteids it was till recently very generally believed that they were taken up from the alimentary canal by the intestinal blood-vessels into the general circulation. This view at first controverted by Leo Asher has since been confirmed by L. B. Mendel. Dr. Levene and Dr. Levin experimented with iodoproteid, a pure proteid substance obtained from the white of eggs, and their experiments tend to confirm the older view of the absorption of digested proteids by the intestinal blood-vessels as against the view of absorption by the intestinal lymphatics. The next subject—viz., Embryo-chemical Studies, by Dr. Levene—deals with the distribution of nitrogen among the various egg proteids at different stages of development of the ovum and is only a preliminary communication.

Messrs. Richard Weil and Robert Frank publish a very brief paper on the Theory of Neuron Retraction, a subject much discussed of recent years among psychologists and neurologists, and they seem to conclude that the evidence is not positive enough as yet to furnish a satisfactory basis for the explanation of facts. Dr. P. A. Levene furnishes a preliminary communication on the Chemical Relationship of Colloid, Mucoid, and Amyloid Substances, showing that the acid radicals common to these substances are very similar to each other, though the question of their identity is still unsettled. Mr. Ward A. Holden contributes a paper on the Changes in the Optic Nerve produced by Acromegaly, as exemplified in three cases. All three patients were middle-aged women, and the symptoms of compression of the optic chiasma and degeneration of the optic nerve fibres following the growth of the pituitary tumour are clearly described and illustrated by a plate. The present volume of the Archives is equal in interest to its predecessors and speaks well for the progress of neurology and psycho-pathology in the United States.

Anæsthetics: their Uses and Administration. By DUDLEY W. BUXTON, M.D., B.S. Lond. Third edition. London: H. K. Lewis. 1900. Price 6*s.*

IN the third edition of his well-known work Dr. Dudley Buxton has made many useful additions and generally brought the subject up to date. In the introduction he gives an account of Dr. G. B. Flux's open method of administering nitrous oxide, not hitherto published in any text-book, and later he describes Dr. F. W. Hewitt's gas and oxygen apparatus with the mode of its employment. Other important additions are descriptions of new methods of prolonging nitrous oxide anæsthesia, Schleich's solutions for general anæsthesia, and his infiltration method of local anæsthesia.

The physiological chapters have been revised and amplified, the most recent researches of Waller and others being mentioned. This part of the work is particularly good and the accounts of the physiological actions of the various anæsthetics are briefly but completely and clearly given. Dr. Buxton goes fully into the important question of the choice of an anæsthetic in various conditions and for different operations. We are glad to see that he advocates the use of ether preceded by nitrous oxide for ordinary surgical work unless there is good reason against it, and also that he recommends the same anæsthetics in operations for adenoids. In the account of the method of using Clover's portable regulating inhaler some authorities will not agree with Dr. Buxton when he directs that during induction the ether chamber should be rotated till the indicator points to F, and that it should afterwards be brought back to 2 and there kept till the operation is over; in many cases there is no need to go beyond 2 or 2½ during induction, and after ten minutes or so most patients can be kept

satisfactorily anæsthetised with the indicator half way between 0 and 1. In this section the possibility and the importance of avoiding cyanosis by frequently raising the face-piece are very properly insisted on. It is a pity to advise the administrator to adopt the practice of blowing out the bag himself. It can be satisfactorily distended by raising the face-piece during inspiration and firmly applying it during expiration.

A very good account is given of the various forms of ether inhalers and their uses. In the section on Chloroform we should like to see more stress laid on the importance of maintaining the pupil at its greatest possible degree of contraction with reference to the fact that a contracted pupil is one of the most valuable signs of safety, and also on the fact that the size of the pupil is a good measure of the depth of anæsthesia. We see no mention of the fact that chloroform is borne much better and that the liability to cardiac and respiratory depression is much less if the administration is begun with ether or gas and ether, so that the patient is efficiently stimulated. There can be no doubt of the advantage of this succession of anæsthetics in long abdominal operations.

The directions for the preparation of patients for anæsthesia and for the after-treatment, and the description of the measures to be adopted in alarming complications and emergencies, are exceedingly good and practical. Dr. Buxton rightly attaches great importance to the horizontal posture during and after the administration of chloroform.

A good plan is adopted in the introduction, where suggestions are given as to the order in which the different chapters are to be read. This is likely to be useful to students who are studying the subject for the first time. The illustrations are admirable.

The Nervous System of the Child: Its Growth and Health in Education. By FRANCIS WARNER M.D., F.R.C.P. Lond. London: Macmillan and Co. 1900. Pp. 233. Price 4*s.* 6*d.*

DR WARNER'S name is so well known in connexion with child study that whatever he writes will be read with interest by those concerned in the education and upbringing of children. In this book Dr. Warner describes the brain and body in infancy, tracing the gradual development of the mental faculty from birth onwards to school age. He very rightly insists that the training of a child must begin from birth and shows how the formation of regular habits as to sleep and bodily requirements and the cultivation of a healthy state of mind prepare the child for a methodical life later. A very clear and excellent chapter dealing with the food, clothing, and the general hygiene of childhood ought to be helpful to anyone in charge of the young. Wrapped up in not always clear language and illustration is the sound idea that children should be taught to use their senses in an orderly manner when called upon to form judgments; "the confusion arising from seeing, hearing, and feeling at the same time" must be removed by "methodical procedure in looking carefully, attending to what may be felt in handling objects, and in hearing distinctly what is said."

Amidst much that is interesting and profitable to teachers and parents, to whom the book is primarily addressed, there is not a little that suggests criticism. Many of the methods proposed for mental training seem to be more adapted for dull or feeble-minded children than for those of average capacity. We cannot imagine a normal child either submitting to, or profiting by, such instruction as is recommended on page 159: "Make him hold out his hand and move the fingers A, B, C, D, E, one at a time in succession, and again all together; then, dropping his hand, look at you while you say and he pronounces the word 'five.' Make him turn his eyes to five similar objects at equal distances apart, then look at you and say 'five'; thus in each case you make five impressions by muscle sense and teach the numeral. Put an ounce weight in his hand, add others up to five ounces, and make him say 'five'; he feels by his muscles the strain added by each weight and feels the 'five' heavier than the one." A normal child who was old enough to appreciate and carry out such directions would already know "how many beans make five."

The Norwegian North Polar Expedition, 1893–1896, Scientific Results. Edited by FRIDTJOF NANSEN. Vol. I. London: Longmans. viii.+16+26+53+137 pp. 46 Plates. 1900. 40*s.* net.

THIS, the first instalment of the account of the results of the *Fram* expedition, forms a large and handsome quarto volume. It commences with an account of the *Fram* itself, which is illustrated by three plates portraying the structure of that vessel; this is followed by a sketch of the geology of Cape Flora, Franz Josef Land, including a description of fossil plants and animals. The purely zoological part of the work contains a report upon the birds collected and the crustacea. Dr. Nansen himself, with the collaboration of the well-known ornithologist Professor Collett of Christiania, deals with the birds, and it is almost unnecessary to state that Professor G. O. Sars is responsible for the crustacea. As might well be supposed, the ornithological section is not interesting from the point of view of new species; so much has been done in this part of the world that new forms could hardly have been expected to turn up. In the crustacean section, however, Professor Sars finds much that is new, especially among the smaller forms, and most particularly among those minute creatures belonging to this order known as copepoda. These are illustrated in 36 plates by the author himself, who is a skilled draughtsman and, we believe, always draws and lithographs his own plates.

LIBRARY TABLE.

Golden Rules of Ophthalmic Practice. By GUSTAVUS HARTRIDGE, F.R.C.S. Eng., Senior Surgeon to the Royal Westminster Ophthalmic Hospital. Bristol: John Wright and Co. London: Simpkin, Marshall, and Co. May, 1900. Pp. 69. Price 1*s.*—This little duodecimo volume is one of a series which may be very well carried in the pocket of the country practitioner's carriage to be consulted when occasion may require. The author, who has had large experience, has compressed much information into a small compass. The diseases mentioned are placed alphabetically and the diagnosis and treatment are given clearly and concisely. The treatment might in some cases be more fully given with advantage and without materially increasing the size of the book.

Manual of Chemistry, Inorganic and Organic, with an Introduction to the Study of Chemistry. By ARTHUR P. LUFF, M.D., F.R.C.P., B.Sc. Lond., F.I.C., and FREDERIC JAMES M. PAGE, B.Sc. Lond., F.I.C., A.R.S.M. London: Cassell and Co. 1900. Pp. 541. Price 7*s.* 6*d.*—Among the many text-books of chemistry written mainly for the use of the medical student perhaps few have been more favourably adapted for hospital schools than the work now before us. The first edition, however, as we pointed out in THE LANCET of July 16th, 1892 (p. 145), contained certain serious errors of omission and commission. Otherwise the plan of the book was excellent. We are glad to see that the whole work has now been thoroughly corrected and revised and brought up to date. By medical students, indeed, such a treatise will be much appreciated in that it provides them with the

work which they require for examination purposes without being essentially a cram book. It must be confessed, however, that the descriptions in many instances are very bare. Short accounts are added of some of the organic compounds of the antipyretic and analgesic series, such as antipyrine, acetanilide, and phenacetin. Another distinctly useful feature is the frequency with which equations are employed in the descriptions of the various chemical reactions. In addition to the theoretical portion of the book a series of tables is provided for the detection of simple salts containing the metals included in the syllabus of both the Preliminary Scientific and Conjoint Board examinations. Some notes are also given on the preparation of those salts that now find a place in the practical work of the latter examination. We have no doubt that in its revised form this manual will be in greater demand than it has been in the past, and it may be confidently recommended to the student now that it is sound in theory and in fact.

The Absent-minded Beggar. By RUDYARD KIPLING. London: The Printing Arts Company, Limited. 1*s.*—The Printing Arts Company, Limited, have published a "Royal Edition" of this wonderfully popular poem illustrated by Gordon Browne, Frank Dadd, and W. Hatherell. The printing, which has been done on an Orloff press, is a curiosity, as the eight different colours have been obtained in one impression. The publishers estimate that in an edition of 100,000 copies their profit would be 3*d.* per copy and they intend to give 3*d.* upon every copy sold to the "Absent-minded Beggar Relief Fund" organised by the *Daily Mail.*

Mona Maclean. By GRAHAM TRAVERS (Margaret G. Todd, M.D. Brux.). Fifteenth and cheaper edition. Edinburgh and London: William Blackwood and Sons. 1900. Pp. 474. Price 2*s.* 6*d.*—We reviewed the first edition of Miss Todd's novel in our issue of Dec. 17th, 1892. When a book has reached its fifteenth edition it is needless to say any more, but we may add that the publishers should be thanked for putting a cheap edition of a clever and wholesome story within the reach of everyone.

Paris. Guides Conty Series. English edition. Paris: 12, Rue Auber. Pp. 336, with appendices and index. Price 2*s.* 6*d.*—The Guides Conty are so well known and so trustworthy that it is hardly necessary to say anything more about them. However, as in all probability many English and Americans will flock to Paris during this year we may remark that they will find almost everything in this guide that they can require. In addition, if the traveller will read a work called "The Stones of Paris" which has been recently published he will learn a great deal about the history of the city which will add to the interest of his visit.

JOURNALS.

Annales de Gynécologie et d'Obstétrique. March and April, 1900. Paris: Steinheil.—In the March number Dr. I. Ronsse discusses the presence of acetone in the urine during pregnancy. He concludes that a minute quantity of acetone is normally present in the urine. The amount is increased in almost all cases during the last 15 days before delivery, as a result of labour, especially when this is prolonged, and during the puerperal period. The author is unable to confirm the statement that the amount of acetone in the urine increases as a result of the death of the fœtus. Dr. Gouillioud contributes a paper upon Salpingostomy and Dr. Labusquière a clinical review of a case of Accidental Hæmorrhage reported by Dr. Fieux, in which condition the latter advocates manual dilatation of the cervix as giving better results than the use of the Champetier de Ribes bag. A summary of the obstetrical and gynæcological communications made to the Anatomical Society of Paris and the usual bibliography conclude the number.

The April number contains a paper upon two cases of Spontaneous Rupture of the Uterus and their Surgical Treatment in which MM. Weiss and Schuhl recommend in the presence of symptoms pointing to a complete rupture of the uterus the termination of the labour as rapidly as possible by the natural passages and the performance of laparotomy. If possible the tear should be sutured, otherwise supra-vaginal or total hysterectomy should be carried out. Dr. A. Fraikin contributes an exhaustive paper upon Sclerocystic Changes in the Ovaries. The number also contains a paper upon Dystocia caused by Uterine Fibroids by M. G. Lepage, and an account of an interesting case of Fibromyoma of the Abdominal Portion of the Round Ligament by M. André Claisse. The proceedings of the Society of Obstetrics, of Gynæcology, and of Pædiatrics of Paris and the tri-monthly bibliographical index are also given.

ARRANGEMENTS FOR THE CELEBRATION OF THE CENTENARY OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN extraordinary meeting of the Council was held on May 31st, the President, Sir WILLIAM MACCORMAC, Bart., K.C.V.O., being in the chair.

A report from the Centenary Committee was received and adopted. The following arrangements have been made:—

On Wednesday, July 25th, there will be a conversazione at the College from 9 to 12 P.M.

On Thursday, July 26th, a centenary meeting will be held in the theatre of the University of London, Burlington-gardens, at 3 P.M. The President will give an address and the Honorary Fellowships will be conferred. On this occasion academic costumes, uniforms, and orders will be worn. At 8 P.M. on the same day a festival dinner will be given in the Hall of Lincoln's Inn by kind permission of the Benchers.

On Friday, July 27th, the Right Hon. the Lord Mayor will give a conversazione at the Mansion House.

In addition to these arrangements Professor Stewart, the conservator, with Mr. S. G. Shattock, the pathological curator, and Mr. R. H. Burne, the anatomical assistant, will be in attendance each morning between 11 A.M. and 1 P.M. to conduct visitors over the museum.

In the library a collection of objects of interest in connexion with the history of the College will be displayed, and Mr. V. G. Plarr, the librarian, will be in attendance each morning to receive visitors.

At the Examination Hall Dr. T. G. Brodie, director of the laboratories, will give lantern demonstrations of the work done in the laboratories.

Many invitations have been issued to foreign and colonial surgeons, and numerous invitations have also been sent to persons of distinction residing in Great Britain and Ireland.

A limited number of seats at the dinner will be reserved for Fellows and Members of the College and the price of the dinner ticket will be two guineas. Applications should be made not later than June 16th to the Secretary, but as it may be necessary to ballot for places subscriptions should not be sent until the Fellow or Member learns that a seat has been allotted to him.

Tickets for the conversazione at the College and the inaugural meeting at Burlington-gardens (including admission for a lady) may be obtained by Fellows and Members on application to the Secretary.

A short history of the College with eight illustrations has been prepared, and it is proposed to present this to guests invited to the centenary celebrations.

THE JOHNSON HOSPITAL AT SPALDING.—The trustees of this institution have received £5000 from the estate of the late Misses Johnson, of Holyrood House, Spalding. The hospital was built and endowed by the generosity of these ladies.

New Inventions.

TONSIL CLAMP.

THIS instrument has been devised by me as a means whereby we may be secure against the hæmorrhage which too frequently occurs in ordinary cases and which is so great a source of alarm to the patient. Much more important is the service which it renders when the operation has to be done upon a young subject under chloroform. When it is understood that with the aid of this clamp the tonsils can be removed with the loss of scarcely a drop of blood its advantages will be readily acknowledged. But a further merit is that it can be applied so as to permit the removal of exactly the amount of tissue desired. If Sir Henry Thompson's postulate be granted—viz., that an instrument should be entirely under the control of an artistic hand and made to do exactly what the surgeon desires—then the superiority of this clamp over the ordinary guillotine must also be conceded. It may also be claimed that the chances of secondary hæmorrhage are much lessened.

The instrument in general form resembles the guillotine, but what corresponds to the blade and which is figured A in the cut, has instead of a cutting edge a somewhat broad and serrated border. When the instrument is in action this border presses the tonsillar tissue, which it constricts, against a similarly serrated surface on the concavity of the ring B. After the fashion of the lithotrite the instrument has a male blade D and a female blade E. On bringing the former home upon the part where constriction is desired the button C throws the screw F into gear, so that as much pressure as is desired can be effected. The lump of adenoid tissue can now be shaved off with a blunt-point bistoury. The instrument is made by Messrs. Arnold and Sons, West Smithfield, London.

D. W. AITKEN, M.B., C.M. Edin.

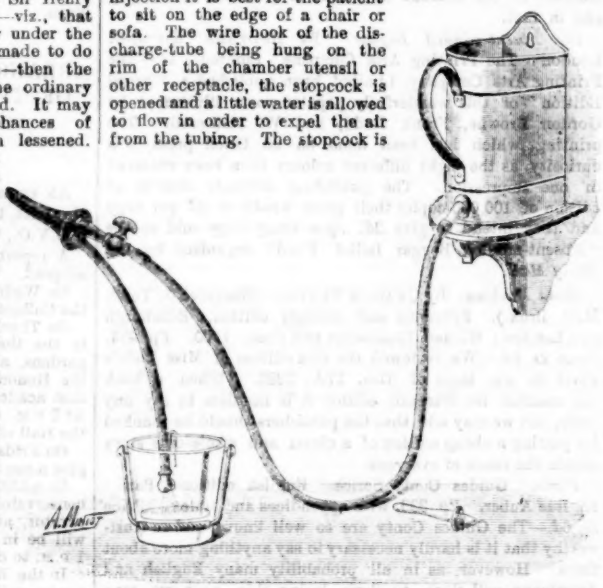
Packington-street, Islington, N.

A POCKET SPITTOON.

THE sputum of sufferers from phthisis being the most active agent in the propagation of the disease, all phthisical patients ought to be provided with some means of guarding against their sputum becoming a source of danger to others. The essential precaution is to prevent the sputum from becoming dry and mixing with dust which is everywhere present, so that the tubercle bacilli are carried up with it and float in the atmosphere. One of the appliances for accomplishing this object is shown in the illustration. It is a bottle of blue glass, made all in one piece, having a funnel-shaped neck and a total height of four inches. It is provided with an easily fitting nickel-plated lid, and from its size and shape may be conveniently carried in the pocket with very little risk of the contents escaping. The price is 1*s.* 6*d.* and the maker is Mr. G. T. W. Newsholme, pharmaceutical chemist, High-street, Sheffield. The contents are disposed of by being thrown on a fire or mixed with a disinfectant and emptied into a water-closet, after which the bottle is thoroughly cleansed.

THE ONAH VAGINAL DOUCHE.

MOST of the many methods that have been devised for the giving of vaginal injections are open to the objection that either the bed-clothes or the patient's under-garments are liable to be wetted during the process, and this in the case of certain metallic solutions and astringent lotions has the further disadvantage of causing indelible stains. To meet this difficulty the Onah douche has a separate tube for the discharge of the used liquid, so that it can be employed without danger of wetting the clothes, especially as the enlarged end of the nozzle prevents any liquid escaping round its base. The douche-can being placed on a high shelf or hung on a nail, the water is supplied under pressure which tends to obliterate the folds of the vagina and causes a constant renewal of fluid round the nozzle. During the injection it is best for the patient to sit on the edge of a chair or sofa. The wire hook of the discharge-tube being hung on the rim of the chamber utensil or other receptacle, the stopcock is opened and a little water is allowed to flow in order to expel the air from the tubing. The stopcock is then closed, the nozzle is inserted in the vagina curving upwards, and the stopcock opened. The can holds two quarts. The instrument can be obtained through any dealer in articles of its kind. For the giving of enemata a bone rectal pipe is supplied fitting into the same stopcock as the detachable vaginal nozzle.



"PORTIA" COMBINED STOCKING SUSPENDER AND SHOULDER SUPPORT.

THE stocking suspender represented in the illustration is made of elastic webbing three quarters of an inch wide, one portion of which is formed into two loops passing over the shoulders and meeting in the middle of the back where it is fastened by means of a crossing buckle. The stockings are held up by two lengths of the same webbing stitched one to each loop and provided with buckles which permit of adjustment according to the height of the wearer. It is intended to be worn between the underclothing and corset and can be easily adapted to any figure. The stockings are suspended directly from the shoulders and by use of this article the circulation is not impeded as it is by garters. In some of the patterns there are rubber clips to make them especially suitable for use with thin silk stockings. The makers are the "Portia" Company, 202, Romany-road, West Norwood, Surrey.

THE LANCET.

LONDON: SATURDAY, JUNE 9, 1900.

AMONG the multifarious questions which occupied the time of the General Medical Council at its last session few were of more importance than that of legislation in Italy and England respectively upon the rights of reciprocal practice. The conditions of medical practice at home and the regulations for acquiring the right to medical registration are pretty well defined, and there is not likely to be any great departure from them as far as domestic legislation is concerned. But we enter another region altogether when we contemplate the British practitioner abroad, and try to lay down laws or principles of law for the acceptance of other States, which shall give our practitioners the right to practise in alien lands and which shall concede to foreigners a similar right in our own country. And this is the region into which the Council has had to enter *nolens volens*, inasmuch as the Privy Council have promised to consider the question of recognising in this country Italian medical degrees.

We are called an insular people. But there are few people in the world less so than we are. Our travellers explore every country, and in ever-increasing numbers reside in other lands. Our commerce permeates everywhere, our ships carry for the world. To be just to ourselves it must also be admitted that we entertain strangers. We have in London, to look at another aspect of the matter, more Germans than there are in some large German towns, more Scotsmen than there are in Edinburgh, more Welshmen than there are in Cardiff, and more Jews than there are in Jerusalem. The men of Britain are at home on every continent, in every capital, and on every sea. They are said at the present moment to be unpopular. That is a passing phase. Complaint is soon heard if they withdraw their custom or withhold their presence from any country, and provision is soon made to conciliate and attract them. In short, with all our insularity we are the most ubiquitous people in the world. It is due to this quality that the General Medical Council has had to face the question of the exclusiveness of our medical laws. The discussion has been forced upon them and upon the Privy Council by men on our own Medical Register. They invade foreign countries, they follow their wealthy compatriots into France, Italy, and Switzerland, and they do so in such numbers and with such success as to excite the jealousy of the practitioners in these countries and to provoke the passing of protective measures against them. Other countries have had their attention aroused to the subject of the exclusive tendency of medical legislation—Germany and Russia, to wit—and have entered into communication with our own Government on the subject. So far we have been as exclusive in our medical laws as other nations if we have not been desirous of inflicting any penalties for encroachment. We have not opened our doors for the free admission to the privileges of the profession in Great Britain to foreign medical practitioners. We have not legalised their position, and it may be admitted that we have not, even in London, recognised the right of foreigners, except in the case of "any hospital established exclusively for the relief of foreigners in sickness," to have medical practitioners of their own nationality. But we have not been cruel in our exclusiveness. We have seldom or never threatened with penalties any practising physician or surgeon possessed of reputable foreign diplomas; we have actually provided by legislation for foreigners in their own hospitals being treated by their own countrymen without English qualifications; and we passed a law 14 years ago, the Medical Act of 1886, for the recognition of foreign diplomas under reasonable conditions. This measure it is now proposed by the Government to apply to Italy, and out of their expressed intention arose the debate on the subject which is reported in our columns.

A great feature of the Act of 1886 was the proposal to enter into reasonable and just relations with other countries as regards the recognition of their medical diplomas; and, in order to do this, it was left to the Privy Council to determine when this law should be acted on in relation to any given country. The medical profession would perhaps have liked the Act better if it had left the determining function in the hands of the General Medical Council. To the latter body, however, is intrusted the decision as to whether the diploma of any given foreign institution furnishes a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of medicine, surgery, and midwifery. The General Medical Council has done well to pass a resolution pointing out to the Government that the concession contemplated by the Italian Government is not equal to the concession which we should have to make to them. We think that our medical brethren in Italy were a little too ready to express satisfaction with the imperfect privilege of attending only their own countrymen, whereas the Act of 1886 would concede to Italians here the full rights of practice. Many will be disposed to agree with Sir JOHN BATTY TUKE that after all the most satisfactory solution of the difficulty would be the acquisition by English practitioners of the qualification of the countries in which they wish to practise. This course has already to a certain extent been adopted in those countries where no other is open, for there are not a few of our countrymen practising in France who have added to their English qualifications the distinguished degree of M.D. Paris. If, however, the Government is bent on "reciprocity" there must be *real reciprocity* and not a mere travesty of the principle of enjoyment of equal rights. Whatever be the departure, if any, decided upon, all will agree that practitioners already established in a foreign country cannot be disturbed in their vocation without a risk of the infliction of considerable hardship upon them being incurred.

THE second reading of a short Bill introduced by the Government in the House of Commons to amend the Housing of the Working Classes Act of 1890 recently produced an interesting discussion on the problem of how to provide the poor in large towns with wholesome dwellings. By Part III. of the above Act local authorities may provide lodging-houses, as the Act calls them, the term including separate

cottages, for the working classes in their district, and the new measure enables councils, other than rural district councils, to go outside the limits of their own locality in order to acquire by purchase suitable sites or houses for this purpose. The present Bill has now been read a second time and would probably have passed this stage of its progress towards maturity almost unobserved but for an amendment moved by Mr. ROBSON, Q.C., which sought to import powers into it to compel railway companies to provide train accommodation for the people who, when the Bill becomes law, may be expected to be housed at a distance from their work. This amendment was ultimately dropped, it being apparently conceded that the existing law was strong enough to meet the requirements of the situation, and that the railway companies had hitherto gone as far as could reasonably be expected of them.

We can well understand that the London County Council, for instance, may be enabled with advantage to purchase land outside the costly area in which it holds sway, in order to build houses which, instead of being of the big block order of architecture, may provide pleasanter and more healthy homes in the form of separate cottages at a smaller total cost. At the same time, no one can deny that to compel railway companies to provide trains in order to further such schemes, and to provide them at a possible loss, is to lay upon the railway companies a large share of the burden of re-housing the working poor, and this view seems to have been adopted by the House of Commons in rejecting a private member's Bill to increase the facilities of railway travelling for workmen living in the suburbs, just at the time when Mr. ROBSON'S amendment was also before it. The debate upon Mr. ROBSON'S amendment produced from Mr. A. J. BALFOUR an interesting pronouncement of the right honourable gentleman's views upon the future conditions of travelling which the coming generation should preserve in order to be able to criticise him in the future in the character of a prophet. "I believe," said Mr. BALFOUR, "we are on the eve of an immense social reform, of an immense augmentation of the means of communication. I believe that electrical traction and other forms of traction are going to play a far larger part in the solution of this difficulty than any of the strange schemes which I have analysed to the best of my ability for the benefit of the House. I sometimes dream—perhaps it is only a dream—that in addition to railways and tramways we may see great highways constructed for rapid motor traffic, which would have the immense advantage, could it be practicable, of taking the workmen from door to door, which no tramway or railway would do." Let us hope that Mr. BALFOUR may be correct in his vaticination; still at the same time let us remember that such a state of affairs as he predicts will ameliorate the condition of the artisan and of the labouring man in regular work, but will hardly touch the vast army of the poor who fail to come under either of these classes, although they have nothing save their own fitful exertions in one direction or another for their support. We can scarcely picture the sweated sempstress or the foreign refugees from Poland, who toil and starve in overcrowded slums within half an hour's trudge from the place where their ill-rewarded work is given out to them, dwelling in a more or less airy suburb, and coming to town in a workman's train or a workman's motor-car to fetch away the materials on which they are to labour unceasingly for the next 16 hours. We can hardly even picture the coster, as a class, travelling in similar wise to take his donkey and cart or his barrow out of a livery stable and proceed to commence his day's operations at the early market where his stock-in-trade is purchased. The seconder of Mr. ROBSON'S amendment, Mr. STEADMAN, M.P., L.C.C., spoke of 400,000 human beings in the county of London living in one-room tenements, 30,000 living six in a room, and 3000 eight in a room. It is not easy to believe that many of these will benefit greatly either by the Government Bill when it becomes law or would have been greatly affected had the amendment in question been passed. Members of this class, if they are ever to live in healthy conditions at all, will still have to live near where their work, such as it is, lies, or where they may most easily seek it. The building of houses for them by the London County Council so as not to form a perpetual drain upon the rates of London seems well-nigh impossible, whatever may be done by private enterprise and philanthropy. The high value of land in all central localities is the main obstacle. It has been the cause of the Bill we have referred to, and it was more than suggested during the debate that the price is inordinately enhanced where the County Council buys under compulsory powers, slum dwellings being then paid for as if they were substantial buildings earning honest profits for their owners.

Under the Housing of the Working Classes Act of 1890, when the arbitrator fixes the compensation payable under an improvement scheme in respect of premises situate within an unhealthy area, he is bound to receive evidence as to the premises being used for illegal purposes and as to overcrowding or defective sanitation. He is then to base his compensation on the rental obtainable if the premises were used for legal purposes and without overcrowding, while their value if in a sanitary condition is to be computed and the amount necessary to put them in such a condition deducted. On the other hand, if the premises are incapable of being made habitable their value is to be the value of the land and the materials on it only. It will be seen from this that, if unhealthy areas are rigorously treated as such, the compensation need not be excessive and, indeed, cannot be so without gross mismanagement. It is, in our view, wiser to urge the strict enforcement of the existing law against the slum-owner, using the law to the full to provide better dwellings to replace those forcibly closed, than to stand idle while hoping for some better or vaster scheme to be devised, such as a tribunal in the nature of a land court to fix the rents of workmen's dwellings. This particular proposal has features which appear to commend it at first sight, but for the reasons given by Mr. BALFOUR to the House of Commons, if for no other, it hardly seems likely to take a definite form at present.

A TREATISE by the renowned ancient physician, GALEN, concerning the foods best adapted for preventing or reducing obesity, entitled in the Latin "De victu attenuante Liber," has now for the first time been edited in the original Greek by Dr. C. KALBFLEISCH of Fribourg. It is dedicated to his

confrère, Dr. J. ILBERG of Leipsic, and is published by TEUBNER of that city. This is the last work of GALEN catalogued at the British Museum, and, so far as we can discover, the editor's statement that its Greek text has never before been printed is undeniable. That its attribution to GALEN is correct is apparently confirmed by the fact that it is quoted and referred to by such classical medical authors as AËTIUS, whose date is disputed, although it was probably about the end of the fifth or the commencement of the sixth century, by an anonymous author who addressed a treatise, "De Medicinâ," to CONSTANTINUS POGONATUS (668 to 685), and by MICHAEL PSELLUS, a philosophical writer of the eleventh century. Besides these, ORIBASIUS, who according to the best authorities was born at Pergamos, in Mysia, the birthplace of GALEN, in his work "De Victûs Ratione" made large use of GALEN'S treatise; and HONEIN-IBN-ISHAK, an Arabian physician of the ninth century, is authoritatively asserted to have made an Arabic translation of it. Dr. KALBFLEISCH, in his elaborate preface, examines at considerable length the origin and nature of the Latin versions in existing editions of GALEN, and particularly states that four pages are wanting in all of them which refer to certain Asiatic wines, of which GALEN says, ἀλλα γάρ οὗτοι ἐναντιώτατοι τῇδε τῃ διαιτῃ (but these are most opposed to this kind of regimen), evidently implying that the western translator into Latin thought it worthless to trouble himself or his readers about Oriental liqueurs. Dr. KALBFLEISCH then proceeds to show whence he obtained the codex of his Greek text—viz., through the researches of a certain MINOIDES MYNAS, whom he amusingly describes as "vanus homo et impurus, sed idem in codicibus pretiosis investigandis prosperâ fortunâ adjutus." This worthy, about 1840, returned from the East with manuscripts in the original Greek of this and other writings, and after they had been temporarily deposited with Messrs. ABBOTT, bankers, at Salonica, they were purchased by various libraries, this treatise finding its home in the Bibliothèque Nationale. With true German diligence Dr. KALBFLEISCH minutely compares the Latin versions—particularly that made by NICHOLAS RHEGINUS for the edification of ROBERT of Sicily in the fourteenth century—with that made by MARTIN GREGORY, medical professor at Paris, about 1580, though his version, he believes, is only a paraphrase of that of NICHOLAS. Without going into the complex details and many referential figures of this introduction to the Greek text we will briefly analyse the contents of the text itself. The entire work is a sort of scientific anticipation of the notorious "Banting" treatment of some 40 years ago. The author deprecates the use of drugs for the dissipation and destruction of fatty particles in the system, stating that in his experience he has known of many cases of renal and rheumatic complaints cured or alleviated by use of a proper diet. Chapters I. to VII. treat of herbs and seeds which are calculated to produce the required result. GALEN here recommends leeks, onions, mustard, and nasturtiums as beneficial, also watercress and pennyroyal, though these are better taken green than dry, since when dry they in a measure become drugs. Generally speaking, herbs and vegetables grown upon hills are stronger than those grown in the valleys. Chapter VIII. describes the birds and fishes which are suited to his regimen, and recommends fishes which haunt rocks and birds frequenting mountains, saying that aquatic birds are fat-producers. All wild birds and game are less fattening than those which are brought up domestically. In Chapter IX. GALEN says that beetroot is not to be taken, neither the roots of vegetables which are round. Chapter X. treats of fruits, saying that mulberries are good as a laxative. Peaches should be eaten rather in a soft pulpy state than in a hard one, but these fruits must not be eaten εἰς κόρον—i.e., to excess. Persian and Armenian melons should also be avoided, but the Seric, or Chinese, melon may be eaten. In Chapter XI. GALEN recommends vegetables which have been preserved in vinegar or brine; and in Chapter XII. he discourses of the effects of honey, milk, and various wines, stating that sweet wines produce thickness of blood. It would be interesting to the profession if a competent medical scholar would translate this treatise into English, but this could only adequately be done by one who had made a considerable study of GALEN'S works in the original Greek.

Annotations.

"Ne quid nimis."

WOUNDS CAUSED BY MODERN SMALL-ARM PROJECTILES IN THE CUBAN CAMPAIGN.

SIR WILLIAM MAC CORMAC in his address at the meeting of the Royal Medical and Chirurgical Society on May 22nd[1] referred to a valuable communication made by Professor Nancrede of the University of Michigan to the last meeting of the American Surgical Association. Professor Nancrede's paper, so opportune at the present time, is published in vol. xvii. of the Transactions of the American Surgical Association and deals with the effects of modern small-arm projectiles, as shown by the wounded of the fifth army corps during the campaign resulting in the capture of Santiago de Cuba. Professor Nancrede gives the outcome of some 1500 cases of gunshot wounds which he had himself observed during the war in Cuba in 1898, about 1400 of which were cared for at the hospital with which he was connected. His present attitude in regard to many of the questions discussed should, as he rightly urges, carry greater weight because it is opposed to that which he formerly held as the result of what his past experience had taught him. The trivial, almost incised, character of most flesh wounds might have been anticipated, because with such immense velocity, if little resistance is experienced, the missile will retain nearly all its energy, practically imparting none to the tissues and the devitalisation of the ball-track is consequently reduced to a minimum. He considers that the greatest advance in military surgery on the battlefield in recent times is the "first-aid" packet and the greatest boon conferred on the wounded soldier has been asepsis and antisepsis, because in the majority of instances rendering his injuries so painless and their complications so slight that even anæsthetics no longer occupy the chief place as a blessing to the wounded because no longer needed. Professor Nancrede is emphatically in favour of prompt and energetic antisepsis, too, in order to minimise the evils resulting from infection. The ubiquitous pyogenic organisms

[1] THE LANCET, May 26th, 1900, p. 1435.

present in and upon a patient's skin immediately surrounding the wound would readily find lodgment in the wound unless at once inhibited by contact with an efficient germicide. The removal of limbs for extensive fracturing of long bones in the Cuban campaign was almost unknown. Exploration with extraction of splinters was sometimes done, but antiseptic occlusion was the rule and was followed by the best results just so long as infection was avoided. Joint wounds were likewise usually successfully treated by antiseptic occlusion with such fixation as was available. According to the official report, "more than a score of gunshot wounds of the knee-joint were thus treated with the happiest results." Antiseptic occlusion also proved the best treatment for most of the thoracic and abdominal injuries. Professor Nancrede was informed that of the perforating ball wounds of the abdomen all that were operated upon proved fatal, while he saw a number which were recovered from without operative intervention, antiseptic occlusion being relied upon.

MR. BARTLEY, M.P., AND THE SHOREDITCH VESTRY.

THE *Times* of May 28th contained a letter from the clerk of the Shoreditch Vestry written under instructions given by the Public Health Committee of that body. This official document deals with a speech recently made in the House of Commons by Mr. Bartley, the member for North Islington, in the course of a debate on the Bill for the Housing of the Working-classes. The Shoreditch Vestry contend that a serious and unmerited reflection has been cast on metropolitan authorities generally and on themselves in particular by Mr. Bartley's remarks. The paragraph in his speech to which they take special exception is as follows:—

"Another matter which hampered progress was the difficulty of satisfying local authorities. Within his own knowledge there was a case where everything that was possible was done in making good sanitary arrangements and providing an excellent water-supply to a block of houses. The local authority stepped in a few years afterwards and condemned the whole arrangement, which had to be altered at the cost of £500. Three years after that the same sanitary authority and the same inspector insisted on reinstating all the appliances which had been removed, and that was done at a cost of £300."

The Shoreditch Vestry believe that the dwellings referred to are within their own area and are the property of Mr. Bartley himself. On this assumption they quote from a report made in the year 1892 by their chief sanitary inspector on the dwellings to which they believe Mr. Bartley refers:—

"It was found that the various water-closets were fitted with tilting water-pans and iron containers—all in an extremely foul condition. In several instances the water-pans were gone and the emanations of the foul containers rose freely into the closets. The cisterns supplying the people living on the first, second, and third floors were found in the water-closets, close up to the ceilings, so that an examination of the state of the cisterns could only be made by removing the floor-boards of the water-closet overhead. This having been done the cisterns were found to be in a very filthy condition and there was abundant evidence that the water was fouled by excrementitious matters overflowing the closet pans. Against that contingency it did not appear that the builder or even the architect had thought it necessary to take any precautions whatever."

The clerk of the Shoreditch Vestry goes on to state that the cisterns were removed and each water-closet was fitted up "in a superior manner." Three years later the pressure in the mains of the East London Waterworks Company was insufficient to supply the upper floors of the tenements during the day time, and Mr. Bartley was required under a magistrate's order to supply storage cisterns in the roof. It is not stated who applied for the magistrate's order for the reinstatement of cisterns, but it is stated that the order was made under the "Public Health Acts." We should be glad to know under what section of what Act it has been held by a magistrate that a landlord can be compelled to supply a cistern in an area in which a metropolitan water company is under a statutory obligation to give a continuous supply of water. The Shoreditch vestry clerk remarks: "That the East London Water Company failed in giving a proper water-supply to the dwellings was not the fault of the sanitary authority who, during the recent water famines, have by every means in their power endeavoured to get Parliament to keep this defaulting monopolist company up to its duties to the public." It must be pointed out to the Shoreditch Vestry that Parliament has delegated the supervision of the water-supply to the vestries and to the County Council, and that these bodies are empowered by Acts of Parliament to insist that a constant supply of water shall be given to London water consumers. With a constant water service cisterns are not needed. The Shoreditch vestry clerk ends his letter by saying that two Royal Commissions and a Local Government Board inquiry have thwarted the efforts of the local authorities of London. It is hardly necessary for us to remind our readers that Lord Llandaff, on the contrary, severely and repeatedly blamed the local authorities of London for not availing themselves of their statutory privileges in dealing with peccant water companies.

SEATS FOR PARIS SHOP ASSISTANTS.

DR. FOVEAU DE COURMELLES is seeking to move the Société Française d'Hygiène so that an agitation may be organised having for its purpose to obtain seats for shop assistants. He declares that in the four leading drapery establishments of Paris there are no less than 6000 women whose health is gravely compromised by the conditions under which they work. They are condemned to sterility, or to dangerous and very difficult accouchements, or to uterine diseases, &c. But the men also suffer in common with the women from varicose veins and from a form of albuminuria which Stirling qualified as "postural albuminuria." Dr. de Courmelles says that in Paris the "demoiselle de magasin" has to be at her post at eight in the morning. She must then proceed to the sixth floor to renew her stock from the store-room. After this she must go to the control and labeling offices which are generally in a second basement. These journeys have to be repeated several times and thus it is necessary to climb 600 or 800 steps before the arrival of the customers. At breakfast time, from 11 to 12.30 A.M., the men are able to go out for half an hour to smoke and enjoy fresher air, but it would not be considered respectable for young girls to stroll about the streets alone. The vitiated air that is breathed in the large and crowded establishments renders the fatigue endured much more injurious and it must not be forgotten that the influenza epidemic began in one of these Parisian establishments shortly after the last Universal Exhibition held in 1889. The women also who are employed for trying on dresses and mantles, &c., depend on the elegance of their figures for their livelihood. Consequently they deprive themselves of some of the food they need for fear of becoming too stout, and then there is, of course, the temptation of lacing too tightly. The hope, so natural in women, of happy and healthy maternity must be abandoned unless they are in a position to leave their work altogether. Many are obliged to remain and are therefore prematurely aged and invalided. When late in the evening the great shop is shut the work is not over. All the goods have to be carefully folded up and put in their proper places. Then the accounts of the sales effected must be added up and the report thereon prepared. When this has been accomplished it is often necessary to wait a long time before it can be checked by the chief of the department and thus it is past 9 P.M.

before the shop assistants are able to go home to eat and above all to sit down. Under these circumstances, there is even more need in France of a Seats for Shop Assistants Bill than in England, where the hours of labour are not so long and where all shops are closed on Sundays and most shops close at 2 P.M. on one of the week-days. As in France so much is attempted by the State and by private charity to preserve infant life and to encourage maternity it is somewhat surprising that the need of providing seats for shop assistants, especially the women, is not better appreciated, and that comparatively little has been said or done in this direction.

THE SOLICITORSHIP OF THE GENERAL MEDICAL COUNCIL.

WE have already announced the resignation of Mr. Farrer who for many years has acted as the solicitor of the General Medical Council, and who will be remembered with respect and pleasure by its members. The Council has elected as its standing solicitor in his place Mr. W. H. Winterbotham, who is also official solicitor to the Court of Appeal. It is understood that the work of the Council as respects law and police-courts will be done by another solicitor to be approved by the Council.

DINNER TO SIR WILLIAM T. GAIRDNER.

IN THE LANCET of March 31st (p. 956) we gave a short outline of the eloquent speech in which Sir William Gairdner intimated to his class in the University of Glasgow his decision to resign his professorship of the Practice of Physic. We have now pleasure in announcing that his very numerous friends in the University and among the medical profession in the West of Scotland will entertain him at dinner in the Windsor Hotel, Glasgow, on Tuesday, June 19th. In view of the importance of the occasion the arrangements are being made by an influential committee, which includes the Rev. R. Herbert Story, Principal of the University, and Sir Hector Cameron, President of the Faculty of Physicians and Surgeons of Glasgow. Tickets, 21*s.* each, can be obtained from Messrs. James MacLehose and Sons, 61, St. Vincent-street, Glasgow, and the committee state that early application for tickets is necessary, as the number is limited, and no application can be entertained after June 14th.

THE DEVELOPMENT OF THE CRANIUM.

A CAREFUL study of the development of the primordial cranium has recently been made by an Italian physician, Dr. Giuseppe Levi of Florence, and the results of his researches, published in the *Archiv für Mikroskopische Anatomie*, Band lv., p. 341, 1900, are contained in the following propositions. The first rudiments of the primordial cartilaginous cranium in man occur in the form of isolated groups of closely compressed connective-tissue cells in looser tissue than that which forms the membranous primordial cranium. There is a certain homology between these aggregations of cell groups and those of the future bone. There is no homology between these rudiments of the skull of man and those described in mammals as parachordals and trabeculæ. The rudiments in question, even after their conversion into cartilage, preserve their identity for some time by the possession of a perichondrial layer. It is only just before the chondrocranium has attained its highest development that all the rudiments coalesce and then only does the chondrocranium form one continuous whole. The rudiments formed by connective tissue are not all formed coincidentiy; that of the occipital bone is the earliest, then follow those of the sphenoid and of the auditory capsules, and the last to appear is that of the ethmoid. The differentiation of the several rudiments does not progress with equal rapidity—as a general rule it advances with the greatest rapidity in the latest formed parts and presents in each case characteristic features; thus in the occipital region it takes place quickly and almost contemporaneously throughout its whole extent, whilst in other instances it commences at a definite spot by a kind of cartilaginous nucleus and spreads uniformly outwards. The enlargement of the rudiments is rapid at first but extremely slow afterwards. The development of the occipital region presents a great similarity to that of the vertebral column. In particular the histological features of the formation of cartilage are different from those of all other segments of the skull and are identical with those of the vertebral column. Moreover, there is one distinct rudiment of a vertebra—that is the occipital—which has a symmetrical origin, and further forwards there are parts of an indeterminate number of vertebræ. The occipital region, like the vertebral column in the first stages of its development, is in connexion with the chorda, but as the cartilage develops it becomes distinct from the chorda. All this supports the statement made by Froriep that the occipital region represents the true spinal segment of the skull in man. The symmetrical rudiments of the body of the occipital vertebra become the condyles of the occipital, the unsegmented portion represents the portio basilaris, and the lateral portion of the arch of the occipital vertebra the processus jugularis. The form of the rudiments antecedent to the appearance of cartilage does not always correspond to that of the cartilage when fully formed since parts of the rudiments undergo absorption. The chief changes that occur, however, are those consequent on the remarkable alteration of position of the occipital and sphenoid rudiments. The floor of the sella Turcica is the only segment of the whole skull which preserves its original position throughout the process of development.

A CURIOUS THEORY OF PLAGUE.

THERE should be no difficulty in preventing the spread of plague according to the remarkable theory put forward by a correspondent in a pamphlet recently published in India. In this pamphlet, a copy of which we have recently received, the author sums up his view in a final paragraph as follows: "I humbly state that the more close the investigations and experiments the more fairly we expect to be convinced of the fact (*sic*) that plague is nothing but slow and gradual poisoning of carbonic acid gas." According to this view we should expect plague to be a chronic disease in this country, having as a starting point mineral water works or breweries, for in these places there is constantly a large proportion of carbon dioxide in the air. As a matter of fact the health of the operatives in these industries, in spite of a high proportion of carbonic acid in the air at times, is good. Carbon dioxide is, of course, a poisonous gas, but only when present in great excess. As Dr. J. S. Haldane has shown air may contain from 3 per cent. or 4 per cent. of carbonic acid gas without producing any serious distress. The author of the pamphlet referred to suggests as a plan of prevention the placing of all patients on the second floor or third floor of the building, for he remarks that carbonic acid gas is a heavy gas and accumulates on the ground floor and it is on the ground floor where the disease flourishes. If there were no such thing as a law of the diffusion of gases human life would have ceased to be long ago, for there is sufficient carbonic acid in the air to form a layer over the surface of the earth of the dimensions of an ocean, and in such an ocean life would be, of course, impossible. It is a pity that the author's simplicity of idea as to the origin of plague is not true, for such a simple *fons et origo mali* could easily be removed. When, however, he speaks of over-crowding, ill-ventilation, and

dirty environment as factors in the etiology of the disease he is right, but to say that these conditions indicate nothing but the accumulation of a large quantity of carbonic acid gas and insufficient quantity of oxygen is to ignore the teachings of modern research and to manifest a lamentable ignorance of the nature of infection.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the list of candidates for vacancies upon the Council should be added the names of Mr. W. H. Bennett, surgeon to St. George's Hospital, and Mr. R. Clement Lucas, surgeon to Guy's Hospital. The full list will be found on p. 1674.

THE INTERNATIONAL CONGRESS OF MEDICINE.

IN answer to many inquiries which have been addressed to it, it is announced by the Executive Committee of the Thirteenth International Congress of Medicine that it has decided that dentists who are not doctors of medicine, but who nevertheless are registered or possess a *diplôme d'état*, either French or foreign, can register themselves as members of the Congress in the Section of Stomatology. Names must be sent to the Bureaux of the Congress, the address of which is 21, rue de l'École de Médecine, Paris.

LOSS OF MEMORY AND OF SENSE OF PERSONAL IDENTITY.

CASES of this sort, though decidedly uncommon in occurrence, are of considerable medical and legal interest. The record of a specially interesting case is published in the *Philadelphia Medical Journal* (May 19th, 1900) and recalls the occurrence of a similar case recently at Cambridge where a young undergraduate disappeared from his quarters and was not heard of for several days till he was discovered staying at an inn in the country some distance from Cambridge. He seemed to have had no recollection of leaving his rooms in Cambridge or of any of the incidents subsequent to that event and until his arrival at the inn, except that he was feeling tired and fatigued and that his boots and clothes were wayworn and dusty. The undergraduate was a youth subject occasionally to epileptic fits at infrequent intervals, and it appears that after such a fit he lost his memory and his sense of personal identity and wandered about until he came to the inn where, wearied and worn out, he took lodgings. He had lost all recollection of his former life and condition and stayed in the inn for some days. Then a second fit occurred after which the memory of his former self returned and he was able to realise his position and find his way back to the University. The case reported in the *Philadelphia Medical Journal* is that of a law student, aged 19 years, living in New York, who suddenly lost his memory and sense of personal identity and found himself wandering in the streets of what he considered a strange city. He was so perplexed that he asked people in the street if they could tell him who he was and went to the libraries and hotels to search in the newspapers for stories of missing persons in order that he might get some clue to his identity. He lived at a hotel and after spending five days in fruitless wanderings and inquiries he finally entered a police station and inquired of the sergeant on duty whether he could inform him in what city he was and requested that search might be made in the record of missing persons. When this was done it was found that there was a description closely tallying with his appearance. A detective was sent with the youth to the address given in the description, where the wanderer was received with great joy by his mother and sisters. To their great surprise, however, he thanked them very politely, but assured them that he did not know them or the place. The mother told the police that he was a somnambulist and had left home previously under similar conditions. In the youth's pocket there was found a diary in which he had entered the details of his daily experience since the time he left home and forgot who or where he was. "His physicians state that his attack of amnesia is gradually passing off, and that while he shows memory of other events in his past life any reference to himself seems to be the signal for another lapse of his memory." The import of cases such as the above is evident both from a medical and medico-legal standpoint, and it is interesting to note their affinities with such neuropathic conditions as epilepsy and somnambulism.

UNIVERSITY OF LONDON: THE ROGERS PRIZE.

AT a meeting of the Senate of the University of London, held on March 28th, 1900, it was resolved that one sum of £100 be offered as the Rogers Prize open for competition to all the members of the medical profession in Great Britain and Ireland for an essay under the following regulation as to the subject and conditions thereof, namely: an essay by any member of the medical profession in Great Britain and Ireland upon the Production of Immunity in Specific Infective Diseases; generally, and with particular reference to any one disease on which the writer of the essay has made original investigations. The essay is to be sent to the Registrar, University of London, South Kensington, S.W., on or before June 1st, 1901.

INTERMENSTRUAL DYSMENORRHŒA.

THE *Boston Medical and Surgical Journal* of April 19th contains an important paper by Dr. M. Storer on this rare and interesting affection. His observations lead him to conclude that intermenstrual dysmenorrhœa is not so rare as has been asserted: he had found it last summer 18 times in 400 "suitable cases" in which he inquired as to its existence. Analysis of 20 cases under his care and of 25 collected from literature led to the following conclusions. As regards regularity the pain in all cases appeared practically every month. In 22 cases it always occurred on a definite day from the beginning of the last menstruation; in 13 there was a variation of two days and in 4 of four days; in 2 with irregular menstruation it occurred on a definite day before the next menstruation. As regards day of appearance from the first day of the previous menstruation, out of 41 cases it came on in from the twelfth to the sixteenth days in 37. As to character, in a large number of cases it was described as paroxysmal, the attacks either coming on at intervals of several hours and lasting from five to 15 minutes or the pain being constant with exacerbations often of the greatest severity and resembling that of labour. As to duration, in 10 it lasted two days; in 9, three; in 8, one; and in 4, four or more. In no case was there a discharge like that of menstruation, but in two cases (one of bleeding fibroids and the other of hæmorrhagic endometritis) there was a slightly sanguineous discharge. Hence the term "intermenstrual dysmenorrhœa" is inapt. On the other hand, a marked increase of leucorrhœa is spoken of in 10 cases, which is evidence of temporary congestion. As to causation, the pain in most of the books is described as ovarian but it is not always so. In one case it disappeared after the removal of a hydrosalpinx; in another, after the uterus was curetted for endometritis; and in a third, stenosis of the internal os was apparently the only lesion. On the other hand, out of 40 cases in which the local condition is stated more or less of an inflammatory condition of the appendages is described in 30 ("ovaritis," 15; "salpingitis," 12; and "hydrosalpinx," three). The exact manner in which the

phenomenon is produced is not known. More or less doubtful explanations, mechanical and neurotic, have been brought forward.

MORTALITY AMONG SEAMEN.

IN the issue of the *Syren*, a paper dealing with mercantile marine matters, for May 30th, appears an article entitled "Deaths on Shipboard" which is particularly interesting from a medical point of view. The Registrar-General of Shipping and Seamen issues monthly mortality returns from which it appears that although the average number of deaths in the British Mercantile Marine is about 300, the returns for March show the very high total of 808. Not all of these deaths, however, actually occurred in March and by far the greater part were due to the heavy gale which swept over the North Sea in the month of February. Some deaths, too, reported in March were due to the hurricane which devastated the Bahamas in August, 1899, and the two together were responsible for the loss of 413 lives by drowning in the case of vessels now reported as "missing." Of the other deaths 26 were due to chest affections and 18 to heart disease. Yellow fever is credited with 11 and malaria with 10 deaths. Falls from aloft killed 10 seamen and 20 met with other fatal accidents. Only one case of death from typhoid fever is reported. The number of deaths due to "chest complaints" is very small and shows that diseases of this kind are due, not so much, as is popularly believed, to cold and wet as to dust and the various other abominations which are found in the atmosphere of great cities. Many forecastles and much sleeping accommodation in the mercantile marine are still far from being what they should be, but there is always plenty of fresh and dust-free air on deck. The tale of deaths from "missing" is, however, a terrible one, and these apparently occurred mainly among fishing craft and coasters. The latter class of vessel is in many cases, we fancy, by no means too well found, and a glance at any wreck chart will show how dangerous are our own coasts to this kind of vessel.

RECOVERY FROM MENINGITIS IN TYPHOID FEVER.

THE following case, described at the meeting of the Société Médicale des Hôpitaux of Paris by M. Troisier, is interesting as an example of recovery from typhoid meningitis. A patient, aged 24 years, had typhoid fever of the adynamic form. The disease ran a regular course and the only peculiarity was the intensity of the headache which began with the prodromal period and its persistence, though in less degree, throughout the whole of the febrile period. The temperature commenced to fall on the twenty-first day, and on the twenty-fourth day, when defervescence was complete, the patient, who had never ceased to suffer from her head, complained of violent headache and photophobia. There were painful contracture of the cervical muscles, which rendered flexion of the head impossible, and repeated vomiting which took place without effort. The pulse was small and irregular and had become slowed from 90 on the previous day to 65. The meningeal streak was well marked. Kernig's sign was absent. These symptoms persisted without fever for four days. The patient was in a state of torpor accompanied by agitation and slight nocturnal delirium. She comprehended what was said to her, but answered slowly and had an absent air. On the twenty-ninth day the vomiting ceased and all the other symptoms improved, the headache and stupor diminished, the stiffness of the neck disappeared, and the pulse became regular. On the thirty-seventh day phlebitis with marked œdema of the whole left lower limb appeared. On the following day the meningeal symptoms had completely disappeared. In about three weeks the phlebitis of the left lower limb had passed away, when the right was attacked, but less severely. Complete recovery ensued. M. Troisier insisted that in spite of the recovery the intensity of the symptoms established the diagnosis of meningitis which was produced by the typhoid bacillus or by some secondary infection. He quoted M. Dupré who has stated in the "Manuel de Médecine de Debove-Achard" that infectious meningitis might become cured. The phlebitis, he thought, was a mere coincidence and but another manifestation of typhoid infection.

THE INCORPORATED SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THE members of the Yorkshire branch of the above society held their annual dinner on May 31st at the Hôtel Métropole, Leeds. Mr. T. B. Fairclough of Mirfield, the President of the branch, was in the chair, and among the guests was Professor Clifford Allbutt who proposed the toast of "Our Society." He referred to the exceedingly valuable results which had been accomplished within his own recollection by the labours of medical officers of health and by the science of preventive medicine. Malaria, plague, and typhus fever were extremely rare or even absent in this country and he thought that in time tuberculosis would become as rare as typhus fever was now. But perhaps the most interesting portion of the speech of the Regius Professor of Medicine of the University of Cambridge was that passage wherein he referred to cancer. He urged his hearers to lose no opportunity of tracing out the distribution of cancer and said that when he reflected what had been done within the lifetime of one man towards the extinction of typhus fever and that plague and malaria had been absolutely abolished in this country he was confident in thinking that even cancer might be wiped off the slate. They did not know much about cancer, but the weight of evidence was on the side of its being an infectious disease. Optimism in medicine is undoubtedly a thing to be cultivated, but we fear that it may be long before cancer is "wiped off the slate." Still, the labours of Mr. Alfred Haviland and Mr. D'Arcy Power with regard to the geographical feature of cancer distribution, to say nothing of the pathological and physiological researches of many other workers, even if no definite results have as yet been arrived at, are at any rate an earnest that the problem is being steadily attacked.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC.

THE first annual dinner of this institution was held at the Trocadéro Restaurant on May 31st. The Right Hon. Lord Strathcona and Mount Royal was in the chair and the large number present testified to the interest which is extended to the youngest of London's medical colleges. The gathering was a most successful one and the committee responsible for the proceedings may congratulate themselves on the results of their labours. The Royal toasts were received with the enthusiasm which characterises all references to the Queen and all members of the Royal Family at the present time. Sir Henry Burdett proposed "The Imperial Forces," referring more particularly to the services rendered by the chairman and other representatives of the colonies to the mother country. Surgeon-Captain Kingscote and the Hon. R. H. Lyttelton responded, the latter thanking those present for the manner in which they had received the mention of the name of his brother, General Lyttelton, now serving in South Africa. Lord Strathcona, in proposing the principal toast, "The Medical Graduates' College and Polyclinic," briefly explained the objects of the institution, the main one being to enable qualified men who had left the hospitals and entered on the practice of their profession to keep themselves

abreast with the advance of medical knowledge. Sir William Broadbent, President of the institution, in responding, further detailed the objects which the promoters of the Medical Graduates' College and Polyclinic had in view. He drew attention to the opportunities which were afforded to medical men to increase their knowledge of the special branches of medical science. Mr. Hutchinson proposed the toast of "The Hospitals and Kindred Institutions," and expressed the desire that the college might work in coöperation with the large hospitals and the principal medical societies. The toast was suitably responded to by the Hon. Sydney Holland who said that he sincerely trusted that the committee of the Medical Graduates' College would not attempt to start another hospital, but would seek to associate themselves with some existing hospital. The toast of "Our Guests" was proposed by Sir Joseph Fayrer and responded to by Mr. Brudenell Carter. The health of the chairman was proposed by Dr. Stephen Mackenzie.

THE "GOUTTE DE LAIT" SOCIETY.

UNDER the above title a society has for some time been at work in France, and Dr. Alfred Hill, the medical officer of health of Birmingham, has made certain inquiries with regard to it. The object of the society is the very laudable one of the reduction of infantile mortality. The method of procedure is by the substitution of a suitable for an unsuitable diet: (1) by encouraging mothers to nurse their offspring; (2) by furnishing a specially prepared milk to meet those cases in which the first of these propositions cannot be carried out; and (3) by arranging for the infant to have the exact quantity of prepared milk necessary. The efforts of the society are directed mainly towards the poorest class, and to them the daily quantum of milk is furnished for one penny. The artisan class is charged 3*d*. and the upper class 6½*d*. The infants thus provided for are weighed frequently with a view of judging as to an increase or decrease of the milk allowance. All milk supplied is sterilised. Dr. Hill reports to the Birmingham Corporation that this system is being attended with great success, there being a very marked decrease in the infantile mortality at places adopting these methods of milk-supply. Certainly the experiment is worthy both of study and encouragement; a diminishing supply of child life calls for vigorous steps to prevent an excessive infantile mortality.

ALARM OF PLAGUE IN SMYRNA.

IN THE LANCET of May 19th (p. 1458) it was mentioned that a case of suspected plague had been discovered in Smyrna and isolated outside the city on May 8th. On May 9th Dr. Cozzonis of Smyrna telegraphed to Constantinople a further description of the patient's symptoms which, although serious, were not precisely those of plague. The bubo in his right groin was still painful when touched, but his medical attendant, Dr. Amado, said that he had suffered from a similar bubo some years ago. His abode, which was a damp and unwholesome place nearly three feet under ground, was disinfected and closed. On May 16th Dr. Cozzonis telegraphed to Constantinople that Dr. Nouri Bey had examined pulp from the bubo microscopically and by inoculation of rabbits. The results were negative, but characteristic lesions were produced in guinea pigs by inoculation with cultures of three days' growth; the animals, however, did not die. The patient was improving and the conclusion was that very few germs were present. No dead rats had been found. On May 28th Dr. Mizzi, *médecin sanitaire* at Smyrna, telegraphed to Constantinople that a Jewish carpenter, 23 years of age, a patient under the care of Dr. Corris, was suffering from pyrexia and enlargement of several glands in the right groin without any concomitant lesion to account for them. Both the patient and his friends declared that they had never been in the neighbourhood of the case already isolated; the abodes of the men were about 400 yards apart. The second case was immediately isolated outside the city and both patients were inoculated with anti-plague serum. Plague still continues at Jeddah and is spreading on the Turco-Persian frontier.

THE HEALTH OF GIBRALTAR.

THE population of this little peninsula varies but slightly and the census figures of 19,100 are still, the medical officer of health reports, applicable. The birth-rate for 1899 was 31·34 and the death-rate 22·03 per 1000. There were nine cases of small-pox with one death during the year, the source of infection having apparently been the Spanish Lines where the disease was prevalent. Primary vaccination is well carried out in Gibraltar, but revaccination is rarely practised. In the matter of milk supervision an example is set to this country by the registration of the street-vendors, stringent control being essential owing to the insanitary condition of the Spanish cowsheds. Major H. P. Elkington, R.A.M.C., the medical officer of health, suggests the establishment of a farm within the British lines, or, failing this, the milk should be sterilised. As regards water-supply it is interesting to note that arrangements have been made for an additional supply of rain-water, four large reservoirs having been constructed in the limestone rock in such fashion that neither bombardment nor fluctuations of temperature will affect the water stored therein. Before use the water will be filtered through "polarite" and aerated by falling as a spray through a distance of some 50 feet. Service pipes are apparently not in use in Gibraltar and Major Elkington strongly advises their establishment. He has, it would seem, no fear as to the action of the water on lead and he strongly condemns the present system of hawking water about the streets.

THE DUTIES OF AN ASYLUM SUPERINTENDENT.

A RECENT number of the *Portadown News* (May 19th) contains an account of the monthly meeting of the Board of Management of the Lunatic Asylum at Portadown, at which various opinions were expressed by the members concerning what they conceived should be the duties of a medical superintendent. Among such duties—in addition to the professional duties—expected of the medical superintendent appeared the following: keeping the subsidiary financial account of the institution, the care and supervision of china and crockery, and the planting of potatoes. The question of acquiring additional land was negatived as the committee were unanimously of opinion—considering that Mr. G. R. Lawless (the resident medical superintendent) did not know when potatoes should be planted—that there was no need of additional land. Among other things which fell within the medical superintendent's province was the selling of old clothes belonging to the patients as ordered by the board, though he (the medical superintendent) was of opinion that such clothes should be destroyed. On the motion of Mr. Best, seconded by Mr. Armstrong, "the board further instructed the medical superintendent to have mortar made on the grounds," and to keep a supply of the same for the needs of the institution. A member of the committee inquired if they could feed more pigs than they had at present and Mr. Lawless replied that they had not accommodation for more. The *Portadown News* concludes its report as follows concerning the committee and their doings: "After the meeting was over several of the governors visited the piggeries, and on finding that a number of them (the pigs)

were over two hundredweight and that in the ordinary course it would be two months before they could be disposed of by tender. It is said that some unprintable expressions were used regarding the management of the Institution in general." It appears clear that the medical and professional duties required to be performed by the medical superintendent as the responsible physician in charge of the patients and of the administration of the asylum could not be performed were he to have to do the other work required by the committee. Evidently some of the committee think that the superintendent should be made a beast of burden and a jack-of-all-trades—a state of things which is not conducive to the best interests of the public asylum service if a medical officer in charge of patients is required to do the work of a steward, an accountant-clerk, a farm-bailiff, a housekeeper, and a manager of the piggeries.

A CYCLING DANGER.

A CYCLING accident which occurred near Leeds on May 26th is no less instructive than it is regrettable. The rider, while descending a steep hill with his feet on the rests, came at great speed against a parapet at the foot of the descent, was thrown over with his machine, and was buried in the mud of the canal which flowed beneath. When extricated he was dead. Such an occurrence is not singular. It has happened before under almost identical conditions. With some variation in details it has probably been less unusual than is commonly understood. For its prevention it is vain to search among mechanical contrivances. Not even the free wheel allows the cyclist such a measure of control as to ensure his safety in the circumstances which we have recorded. There is only one possible remedy, that is resolutely to refrain from riding down hill, and especially from "coasting," unless the rider feels assured of his control over his machine and understands the road he is travelling. The slope may end with a sharp curve or with more than one such in succession, or a country cart may be mounting the hill unseen and very possibly, too, on the wrong side. In either case there is danger, no matter how expert the cyclist. Yet not a few ride down hills which are notoriously dangerous and are so marked in the road maps. Another cause of accident is to be found in the habit of riding with the head down, the handle-bars being placed low. Of course, the rider can avoid this if he pleases and he ought certainly to do so when on a declivity. Even on a flat road there is strictly no more reason for the amateur to ride stooping than there is for an ordinary rider to sit like a racing jockey. To ride a bicycle so down a hill-slope is only to court misfortune.

LORD LISTER has consented to open the new clinical laboratories at the Westminster Hospital on Tuesday next, June 12th. Amongst those who have accepted the invitation of the president, treasurers, and committee to be present on the occasion are Lord Kelvin, the Dean of Westminster, Sir Michael Foster, the President of the Royal College of Physicians of London, the President of the Royal College of Surgeons of England, Sir John Burdon Sanderson, and Sir Joseph Fayrer.

THE St. Petersburg Military Medical Academy has received a considerable grant from the Minister of Finance in order to establish a clinic for persons suffering from the effects of alcoholism.

WE regret to announce the death at an early age of Dr. G. E. Williamson, F.R.C.S. Eng., surgeon to the eye department, Royal Infirmary, Newcastle-on-Tyne.

THE MEDICAL, SURGICAL, AND HYGIENIC EXHIBITION.

JUDGING by the satisfactory attendance of visitors, comprising medical men, pharmacists, hospital nurses, and others, "the fourth annual exposition of professional exhibits," which was held this week at the Queen's Hall, Langham-place, attained a success not less in degree than that which has marked former occasions. As we have pointed out before, this annual exhibition affords an excellent opportunity to practitioners in London of inspecting new preparations, appliances, and other objects of medical interest. Further, the exhibition being necessarily held on a small scale a good deal may be seen without experiencing that sense of fatigue which is commonly felt after a tour along row upon row of stalls. The exhibition at the Queen's Hall on the present occasion was tastefully arranged and very compact. One advantage which the hall offers for the purpose is that it is carpeted, so that the irritating noise of shuffling boots on plain wooden flooring is avoided, which makes conversation comfortable and enables the exchange of opinion between the exhibitors and the visitors to be carried on without interruption. The exhibition was opened on Tuesday, June 5th, by the president of the Organising Committee, Mr. Fred Weiss. In the course of a short and appropriate speech Mr. Weiss stated that every year showed an increase in the attendance of visitors, which fact was evidence of the increasing popularity of the exhibition. There was an increase last year of 2000 visitors over the previous year, the attendances being respectively 4000 and 6000. At the time when Mr. Weiss declared the exhibition open, which was shortly after 2 P.M., there were still a few stalls unfinished, but on the whole the organisers may be congratulated on having the exhibition practically ready for visitors at the time announced.

There was an abundant display of drugs, comprising the most recent introductions both in regard to special forms of administration and novelty of composition. The stall of Messrs. Cooper and Co. of 80, Gloucester-road, South Kensington, London, S.W., presented an excellently arranged and attractive display of drugs, special foods, and mineral waters. This firm prepares mineral water aerated both with oxygen and carbonic acid gas and very special precautions are taken to ensure the purity of the distilled water used. The water may be obtained plain, when it is known as "Globenaris," or it may be procured with definite amounts of lithia, piperazine, soda, and other soluble medicaments. The exhibit included also the flexible, tasteless, and readily soluble wafer capsules known as "cachoids" and other special preparations. A great number of interesting preparations were shown at the exhibit of Mr. W. Martindale of 10, New Cavendish-street, London, W. In addition to well-known drugs in various attractive forms there were amongst the specimens bacteriological culture media, stains and reagents, and other apparatus. The portable urine test case is very useful, as we have shown, for the requirements of the busy medical man, for it enables him to conduct an analysis sufficiently accurate for clinical purposes at the bedside. Amongst the interesting specimens of drugs shown were caoodylic acid which has recently been employed in the treatment of phthisis, and the sodium salt which is an excellent means of administering arsenic per rectum. Close by was the well-stocked stall of Messrs. Parke, Davis, and Co., of 111, Queen Victoria-street, London, E.C. A greater variety of drugs and related preparations, as well as various methods for their administration, could hardly have been displayed. The standard fluid extracts of this firm are well worth attention, as affording a fluid preparation containing definite active principles in known proportion. The drugs are carefully assayed before the extract is prepared, both chemically and when necessary physiologically, so that the therapeutic activity of a given measure of the extract may be relied upon. The exhibit included serums and toxins, euthymol preparations, antiseptics, mercurol, a nucleide of mercury which we dealt with recently in our analytical columns, and that interesting and powerful enzyme taka-diastase. The chocolate-coated tablets of this firm are also worthy of commendation. A very interesting series of pure chemicals,

alkaloids, and other preparations was exhibited by Mr. E. Merck of Darmstadt and 16, Jewry-street, London, E.C. This firm has a well-known reputation for the purity of fine drugs, and also in being enterprising in the manufacture of new pharmaceutical preparations which are suggested from time to time in medical practice. The exhibit included some organic iodine and bromine preparations and hæmoglobin. The preparations shown were excellent specimens of the art of obtaining pure crystallisable as well as non-crystallisable products in the laboratory. Some new interesting pharmaceutical products were shown by Messrs. Burgoyne, Burbidges, and Co., of 12 and 16, Coleman-street, London, E.C., who are the sole agents for the United Kingdom for Von Heyden's pharmaceutical products. Creosotal and duotal, which are respectively the carbonates of creosote and guaiacol, are examples. Besides these there were the interesting preparations known as "Collargolum," a form of metallic silver, but non-irritating and non-poisonous although a powerful antiseptic, and "Hyrgolum," which is described as "water soluble metallic hydrargyrum." As we have recently shown, this latter substance yields a clear but dichroic solution in water and this novel substance in the form of an ointment is said to be more effective than ordinary mercury. The special preparation known as Wampole's perfected and tasteless preparation of the extract of cod-liver oil was submitted for inspection by the representative in this country, Dr. E. A. Martin, 4, Duke-street, Adelphi, London, W.C. As we have before pointed out it contains certain alkaloidal and other principles found in the liver of the cod, but the oil is carefully eliminated. In addition to these it contains the hypophosphites, fluid extract of wild cherry bark, and extract of malt which contribute in no small degree to the undoubted tonic qualities of the preparation. Clinical experience is quoted in proof of the statements in regard to its administration in debility. Synthetics were, as might be expected, largely exhibited by the Bayer Co., Limited, of 19, St. Dunstan's-hill, London, E.C., and Elberfeld. Amongst comparatively recent introductions should be mentioned aspirin, a substitute for the salicylates which is said to avoid their unpleasant effects; heroin, a substitute for codeine; and protargol or proteinate of silver which has been used in the treatment of gonorrhœa. A stainless iodine ointment known as "Kelpion" is being introduced by the Kelpion Company, Norgrove Buildings, 59A, Bishopsgate-street Within, London, E.C. Kelpion is stated to be quite non-irritating, and statements are made in favour of its use in rheumatism and syphilis. Messrs. Arthur and Co., of 69, Berners-street, London, W., brought forward their well-prepared gold compounds; the one known as "Bromaurum," which is a brom-arsenate of gold, apparently acts in preventing the formation of urohæmatoporphyrin and in controlling the morbid process characteristic of muscular and chronic rheumatism. Samples of uric acid illustrating the control over the disease (by different degrees of pigmentation) were shown. Similarly samples of pigmented uric acid were shown illustrating the influence of an excess of alcohol in promoting the secretion of hæmatoporphyrin in antagonism to bromaurum. The exhibit included other well-known preparations which are specialities of this firm, as for example, sanochinol, described as a new atoxic derivative of quinine and a remedy for tropical fevers; tannopumilio, a remedy for irritation of the skin and bromidrosis, a compound of digallic acid with the principle of the essential oil of the pumilio pine. Messrs. Wyley's, Limited, of Coventry devoted the space on their stall chiefly to some excellent administrative forms of drugs, such as cachets, capsules, gelatin-coated pilis, and "tropels" or compressed lozenges. Some elegant pharmaceutical preparations artistically relieved this display. Messrs. Oppenheimer, Son & Co., Limited, of 179, Queen Victoria-street, London, E.C., made a feature of palatinoids and bi-palatinoids in their well-arranged exhibit. There are many applications of this ingenious form of vehicle for drugs which deserve attention. In the first place the palatinoid administers the drug in the powdered condition, while preserving the contents against deterioration from atmospheric influences. An important application, too, of the palatinoid appears in the case of animal substances. Amongst the other specialities shown by this firm were palatinoids of liquids and tinctures and bi-palatinoids of Easton's syrup. Messrs. F. Newbery and Sons, of 27 and 28, Charterhouse-square, London, E.C., exhibited largely on behalf of Messrs. W. R. Warner and Co., of Philadelphia and New York, although the exhibit included a very comprehensive series of their own granular effervescent salts. Perhaps the most interesting and important subjects of exhibits by Messrs. J. F. Macfarlan and Co., of 93 and 109, Abbey-hill, Edinburgh, and of 9 and 11, Moor-lane, London, E.C., were the double cyanides of mercury and zinc used for the well-known dressing introduced by Lord Lister. The exhibit included the specially purified chloroform for which this firm holds a deserved reputation. In addition were the opium derivatives, morphine benzoyl, morphine diacetyl, and morphine ethyl hydrochlorides, which are said to be milder and less toxic than morphine and codeine and more certain in their action. Vitæ Ore affords a simple and ready means of producing a chalybeate water with tonic properties. As we have shown, it consists of oxidised pyrites and its properties were explained to the visitors by representatives of the Vitæ Ore Co., Limited, of 39, Temple-chambers, London, E.C. Amiral Soap may be mentioned in this paragraph, since the soap is but a vehicle for applying certain bile principles which are said to reduce corpulency by simple application to the skin. It is said to reduce the excessive fat of the body wherever applied, but on this point some evidence would seem to be required upon medical authority. The exhibitors were the Amiral Soap Co., Limited, 3, Throgmorton-avenue, London, E.C.

We shall continue our account next week by dealing with the special foods and other articles of interest which were on exhibition.

(To be continued.)

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ELECTION OF MEMBERS OF COUNCIL.

ON Thursday, July 5th, a meeting of the Fellows will be held for the election of four members of Council. In consequence of the additional year of office of Sir William Mac Cormac, Bart., K.C.V.O., coming to an end during his presidency he will remain a member of the Council for another year.

The following list of the 24 members of the Council gives the date at which each member retires:—

Retire in 1907.—Mr. T. R. Jessop, Leeds General Infirmary (first elected 1891); and Mr. H. W. Page, St. Mary's Hospital.

Retire in 1906.—Mr. F. Richardson Cross, Bristol Royal Infirmary; Mr. Henry Morris, Middlesex Hospital; and Mr. John Langton, St. Bartholomew's Hospital (first elected 1890).

Retire in 1905.—Mr. H. G. Howse, Senior Vice-President, Guy's Hospital (first elected 1889); Mr. Edmund Owen, St. Mary's Hospital; and Mr. Rickman J. Godlee, University College Hospital.

Retire in 1904.—Mr. Thomas Bryant, Guy's Hospital (first elected 1880); and Mr. T. Pickering Pick, St. George's Hospital (first elected 1888).

Retire in 1903.—Mr. A. Willett, St. Bartholomew's Hospital (first elected 1887); Mr. H. T. Butlin, St. Bartholomew's Hospital; and Mr. F. Treves, London Hospital.

Retire in 1902.—Mr. Reginald Harrison (first elected 1886); Mr. Howard Marsh, St. Bartholomew's Hospital (first elected 1892); and Mr. J. Hardie, Royal Infirmary, Manchester.

Retire in 1901.—Sir William Mac Cormac, President, St. Thomas's Hospital (first elected 1883); Mr. N. C. Macnamara, Westminster Hospital; Mr. A. W. Mayo Robson, Leeds General Infirmary; and Mr. W. Watson Cheyne, King's College Hospital.

Retire in 1900.—Sir Thomas Smith, St. Bartholomew's Hospital; Mr. J. Tweedy, Junior Vice-President, University College Hospital; and Mr. Alfred Cooper.

A fourth vacancy is occasioned by the death of Mr. Davies-Colley, whose term of office would have come to an end in 1904.

Sir Thomas Smith does not intend, we understand, to apply for re-election.

For the four vacancies two of the retiring members of the Council—viz., Mr. Tweedy and Mr. Cooper—are applying

for re-election. A former member of the Council, Dr. J. Ward Cousins of Portsmouth, is again coming forward, and ten other Fellows are offering themselves. These are Mr. C. H. Golding-Bird and Mr. R. Clement Lucas of Guy's Hospital; Mr. H. H. Clutton, of St. Thomas's Hospital; Mr. W. H. Bennett, of St. George's Hospital; Mr. John H. Morgan and Mr. J. A. Bloxam, of Charing-cross Hospital; Mr. A. Pearce Gould and Mr. J. Bland-Sutton, of Middlesex Hospital; Mr. W. J. Walsham, of St. Bartholomew's Hospital; and Mr. Jordan Lloyd, of Birmingham.

It is quite possible that all these thirteen candidates may not go to the poll. Nomination forms must reach the secretary by Monday, June 11th. At present St. Bartholomew's Hospital has five representatives; Guy's Hospital, University College Hospital, and St. Mary's Hospital have respectively two representatives; and the following hospitals have one representative apiece: St. George's, King's College, London, Middlesex, St. Thomas's, and Westminster. Two members of the Council are connected with special London hospitals and four are attached to provincial hospitals; Leeds General Infirmary has two representatives and Bristol Royal Infirmary and Manchester Royal Infirmary have each one.

THE PREVENTION OF TUBERCULOSIS.

THE interest in the prevention of tuberculosis, we are glad to see, is by no means abating, and the various local bodies throughout the country continue to further the erection of sanatoria and other means of fighting the disease which is responsible for so many deaths yearly.

PLYMOUTH.

The Borough Council of Plymouth at their meeting held during the second week in May received a report from the Sanitary Committee stating that a deputation from the Devon and West Cornwall Branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis had waited upon them and had submitted a scheme for the voluntary notification of phthisis. The Sanitary Committee recommended that the scheme should be adopted and that notifying medical practitioners should be allowed a fee of 2*s*. 6*d*. for each private patient, and a fee of 1*s*. for each parochial or dispensary patient, notified. The recommendation was unanimously adopted.

DUNDEE.

The city of Dundee is about to erect a sanatorium for the treatment of tuberculous patients, the expenses of which are to be mainly defrayed out of the very generous gift of £10,000 contributed by ex-Provost Moncur. The plans were approved by the Works Committee on May 14th. The site is on the Airlie estate and has been given by Lord Airlie. The whole establishment is to cover an area of between 20 and 30 acres and the building will consist of three blocks. The residential block will hold 34 patients and will have a frontage of 200 feet, and there is accommodation for the matron, nurses, and resident medical officer, as well as for the patients. The second block is devoted to a dining-room, kitchens, and offices, while the third contains a laundry and a lighting plant.

YORKSHIRE.

The annual meeting of the Yorkshire Branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis was held on May 14th in the Museum of York, Mr. Alderman E. Gray being in the chair.—Dr. W. A. Evelyn read the report which showed that the committee appointed to inquire into and to decide upon a site for the erection of a sanatorium had not yet been able to come to a conclusion. During the year 1899 there were 48 deaths of children under the age of five years from tuberculous diseases. This gave a rate of about 20 per 1000 births. There is great scope for the York branch to work for the promotion of a pure milk-supply.

LIVERPOOL.

A public meeting was held on May 18th in the Town Hall, Liverpool, its inception being due to an earnest request from the medical profession in Liverpool that a Liverpool Branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis should be inaugurated. The Lord Mayor presided, and there were also present Lord Derby, Sir William Mitchell Banks, the Rev. J. Bell Cox, a large number of local medical men (including Professor Rubert Boyce), while Mr. Malcolm Morris came from London and Dr. Arthur Ransome from Bournemouth. An account of this meeting has been already given by our Liverpool correspondent.[1]

ARMY MEDICAL REPORT FOR 1898.[2]

SECOND NOTICE.[3]

IN our previous notice we took a preliminary canter, as it were, over the ground which is occupied by the last published volume of the annual series of these reports, and gave a brief and cursory outline of its contents accompanied by a summary statement of the general health conditions of the troops at home and abroad during 1898. Our purpose now is to select a few points of interest which lend themselves to consideration and comment rather than to touch upon the classified statistical results at the different stations or to compare these with one another. Those of our readers who are more particularly interested in such matters will naturally refer to the report itself for information. As everyone knows public interest is absorbed at the present moment, almost to the exclusion of everything else, in the events which are taking place in South Africa. A glance at the daily journals is unfortunately sufficient to show the important rôle which disease, and notably enteric fever, occupies in the history of the present war. This fever is a veritable scourge of armies in the field and this has been even more the case with the expeditionary armies of other military powers than with ourselves. We find abundant evidence of the prevalence of enteric fever in South Africa in the report under review—at Ladysmith, Pietermaritzburg, Wynberg, King William's Town, and Simonstown, for example—long before the arrival of the British expeditionary force had taken place in that country, and we are therefore not required to have recourse to the theory of any fresh introduction of the disease there by the newly arrived troops. As the subject is one of vast importance in relation to the diseases incidental to war service and camps we need make no apologies for dealing with it more especially. As we have said on previous occasions it is a generally recognised fact, be the explanation what it may, that there is an increased liability to contract enteric fever at certain periods of life; in other words, that there exists an enteric fever age-period which includes the time during which soldiers are serving with the colours in all short-service armies. But a still more powerful predisposing factor is recent arrival in a tropical or subtropical climate, especially during the hot season. We all know what the heat has been in South Africa, that most of the troops were young soldiers, and that all may be said to have newly arrived there. As far as India is concerned this susceptibility or vulnerability of the European constitution to enteric fever of fresh arrivals is at its maximum during the first year, markedly declines during the second and third years, and is, practically speaking, nearly exhausted between the third and fourth years of Indian service. It is not, of course, pretended that these are the only disease-factors, for if the real cause of enteric fever be the bacillus of Eberth and Gaffky then it follows that the presence of that specific germ or micro-organism is indispensably necessary to its production; but this bacillus must in that case be much more widely distributed in nature than our present knowledge would lead us to suppose in order to account for all the enteric fever that occurs, or, to put it another way, the number and extent of the infected areas on the surface of the globe must be greater than has been hitherto thought to be the case. Dr. Horton-Smith's recent Goulstonian lectures at the Royal College of Physicians of London on "The Typhoid Bacillus and Typhoid Fever" have opened out a wide field for further investigation in various directions, but especially in this respect that it has been found to be not uncommon for the

[1] See THE LANCET, May 26th, p. 1249.

[2] Army Medical Department. Report for the Year 1898, with Appendix. Vol. xl. London: Printed for Her Majesty's Stationery Office by Harrison and Sons, St. Martin's-lane, Printers to Her Majesty. 1900. Price 2*s*. 6*d*.

[3] The first notice was published in THE LANCET of May 12th, 1900, p. 1384.

bacillus to remain dormant for long periods of time in the bodies of those who have been attacked and have seemingly quite recovered and meanwhile remained in perfect health. Assuming that to be the case such individuals may prove so many sources of hitherto unrecognised infection. Touching the liability of the young soldier to contract enteric fever in the first year of his Indian service this is very strikingly brought out in the chart illustrative of the relation of service in India to cases of this fever which appears at page 179 of the Army Medical Report for 1898. The admission ratio of 91·5 per 1000 in that year is out of all proportion to those that follow in subsequent years, the next highest being 38·0 for men of the second year of service, while it is only 1·0 per 1000 for those of 10 years' Indian service and over.

The principal medical officer (Surgeon-General W. Taylor, C.B., A.M.S.) writes as follows concerning enteric fever amongst the troops in India:—

> The liability of troops on service to enteric fever, even when encamped on what appears to be virgin soil, is a fact in regard to which almost all observers are unanimous, and a considerable part of the increase in both the admission and mortality rates for 1898 can be accounted for by field service. The chief instances of increase from this source are the outbreaks in the Khyber and Malakand Forces, admissions from troops returned and passing through from field service at Rawal Pindi, and importation by regiments arriving from the front at Ahmednagar, Fyzabad, and Cawnpore. A second large source of increase was the Quetta epidemic. A small part of the increased admission rate may be due to improved means of diagnosis. Thus, at Quetta Widal's test was employed in 32 cases and was much relied on for the differentiation of typical cases. It was also used at Rawal Pindi and Ahmednagar.

Whilst on the subject of enteric fever in relation to troops on field service there is also another point to be considered. We remember that an army medical officer some years ago called attention to the fact that the period of incubation in the cases of soldiers returning from a campaign where enteric fever was epidemic or prevalent was often of a very prolonged kind in those attacked, and he cited numerous examples that had fallen within his experience. Turning to page 264 of the Army Medical Report dealing with Egypt and Cyprus we find the following statements which seem to be strongly corroborative of this and worthy of further attention. The table shows the period elapsing between the development of attacks of enteric fever and the data of the return of the individuals from "Up Nile" in all those cases which occurred amongst troops previously serving with the Khartoum Expeditionary Force.

Number of Cases of Enteric Fever occurring—

Stations.	Within first week after return.	Within second week after return.	Within third week after return.	Within fourth week after return.	Within fifth week after return.	Within sixth week after return.	Within seventh week after return.	Within eighth week after return.
Alexandria	14	19	49	31	12	3	1	—
Cairo	31	39	31	29	6	15	10	1
Cyprus	—	—	—	—	—	—	—	1
Total	45	58	80	60	18	18	11	2

Return of Cases of Enteric Fever occurring in Soldiers more than eight weeks after their Return from the Khartoum Expedition, 1898.

Date of return from the Soudan.	Date of admission to hospital.	No. of cases.
Sept. 15th, 1898	Nov. 23rd, 1898	7
,, ,, ,, ...	Dec. 7th, ,, ...	
,, ,, ,, ...	,, 18th, ,, ...	
,, ,, ,, ...	Nov. 27th, ,, ...	
,, ,, ,, ...	,, 28th, ,, ...	
,, 24th ,, ...	Dec. 9th, ,, ...	
,, ,, ,, ...	,, 27th, ,, ...	

It might, of course, be said that such cases caught it from one another after return from field service or that they were really suffering from the disease during longer and more variable periods than was supposed.

So far as our present experience extends—for we must await the official publication of the statistical results obtained during the present war before arriving at any final conclusion—it does not seem that the practice of inoculation as a safeguard against typhoid fever has been attended with that amount of success which had been hoped.

THE WAR IN SOUTH AFRICA.

IT is easy to sum up the war news of the week in a sentence. Pretoria is in our possession and the Union Jack now flies where the flag of the Transvaal Republic has flown for nearly 20 years. The entry of the British force into the capital of the Transvaal under Lord Roberts is an epoch-making event in history and the importance of the success which has been achieved has probably not even yet been thoroughly appreciated; but everybody recognises that with the fall of Pretoria the back of the Boer rebellion has been broken and that a long and painful chapter in the annals of our South African Dominion has been closed.

Although the war is not over we may confidently hope that a new and better era has been opened for all concerned with South Africa, not excluding the Boers themselves, for when the political settlement and arrangements have been made the same political freedom and equality of opportunity will be extended to all alike. But as we have said the war is not yet over. There remains a large body of discontented Boers scattered over the country who may still be expected to retain and exhibit signs of vitality and separate and independent action for some time to come, for their troops have usually succeeded in their encounters with us in effecting their retreat and in carrying off their guns. Still the Boer forces have no longer any organic cohesion. They have hitherto shown no strategical ability and are not likely to do so now, and their power to harass our troops and prolong the campaign by a guerilla system of warfare must inevitably become weaker and weaker until it finally ceases altogether. The sudden collapse of the burgher forces has demonstrated the hopelessness of resistance by unorganised armed forces, however brave, when opposed to a trained and disciplined army intelligently conducted.

There is still a large amount of enteric fever among the British troops in South Africa and the sufferings undergone by these unfortunate patients must be considerable under all the circumstances of this war, for they have usually to be transported for long distances to stationary hospitals in the rear where many of them arrive in a very pitiable condition. Although such large quantities of clothing and medical comforts have been sent out from this country by the Government and the numerous sources of charitable supply we do not think, from what we hear, that there is any reason for the public to relax their efforts, for the sick coming down from the front are in need of ample supplies of clean and warm clothing of all kinds. It is, after all, not so much the wounded who claim our help and sympathy in war as the sick—those suffering from enteric fever, dysentery, and acute respiratory affections. Their hardships, sufferings, and discomforts make up in the aggregate a terrible total, because, as we all can recognise, the many unavoidable conditions of war and field service are so unfavourable and inimical to cases of this nature.

The Imperial Yeomanry Base and Field Hospitals are increasing their accommodation in consequence of the large number of cases of enteric fever and kindred diseases. Further equipment is being sent out as rapidly as possible, and 10 additional nurses have left within the past few days. The field hospital and the bearer company have left Bloemfontein for the front.

Major-General the Hon. Herbert Heaton, the hon. secretary of the Portland Hospital, has received a letter from Surgeon-Major C. R. Kilkelly, R.A.M.C., commandant of the hospital, showing that from Jan. 8th to May 11th 92 officers and 613 non-commissioned officers and men were admitted into the hospital. When the letter was despatched 25 officers and 95 men still remained under treatment. Of the others 97 officers and men had been discharged for duty,

five discharged for garrison duty, and 98 sent to England. Four officers and 254 men were convalescent, 114 officers and men had been transferred to other hospitals, and only one officer and nine men had died. We are extremely glad to notice that the case of the Indian and native stretcher bearers is not likely to be lost sight of, for these men have rendered very valuable services in the present war which thoroughly deserve to be rewarded.

SICK AND WOUNDED OFFICERS' SURGICAL AND MEDICAL AID COMMITTEE.

This committee, which includes many members of the profession in London and elsewhere, met on Wednesday last, June 6th, at Hampden House under the Presidency of the Duke of Abercorn to receive the report of the work accomplished to the present date. The management of the funds subscribed, the recommendation of invalided officers to the professional members of the committee, and the allocation of convalescents to the various private houses and hotels which have been kindly offered for their use is deputed to a confidential executive committee consisting of the following members: the Duke of Abercorn, the Hon. Arthur Brodrick (who acts as honorary secretary), Lieutenant-Colonel H. Charlesworth, R.A.M.C., and Colonel Stacpole, D.A.A.G. (who superintend the disembarkation of invalided officers at Southampton), Mr. Lyttelton Gell, Surgeon-General Hamilton, A.M.S., Dr. Donald Hood, Mr. F. A. Johnston, and Mr. J. H. Morgan.

The President reported that since the last meeting the following gentlemen had been added to the General Committee: Sir Felix Semon, Sir William MacCormac, Mr. Frederick Treves, Mr. Howard Marsh, Mr. Mackenzie Davidson, and Mr. Warrington Haward. Lieutenant-Colonel Knocker, A.A.G., Devonport; Lieutenant-Colonel Bourke, R.A.M.C., Woolwich; and Lieutenant-Colonel McLeod, D.A.A.G., Chatham, were elected members at the meeting.

In addition to the invaluable assistance rendered by physicians and surgeons on the committee over 200 offers of hospitality in private houses and from hotels (either gratuitously or on reduced terms) have been received either directly or have been transmitted to the committee by the War Office.

Many officers have already availed themselves of these invitations, though the chief demand upon them is likely to arise at a later date. The coöperation of the Countess of Dudley in arrangements for the wives or other relatives accompanying invalided officers has been very gratefully appreciated. 60 officers have already been assisted by the Executive Committee, while others either through their private circumstances, or through the improvement in their health during the voyage home, have not required the committee's assistance. 160 officers are at the present moment on their way to England, of whom a large proportion are likely to accept the committee's help; and the President called attention to the resolution passed at a previous meeting that surgeons or physicians who were consulted by such officers should receive a letter signed by a member of the Executive Committee. The cases which have so far received surgical or medical assistance from members of the committee fall under the following heads. 34 surgical cases have been dealt with and five new cases are coming forward at the present moment. 22 have had advice and treatment, several of whom have been sent to the country or abroad. Two have returned to South Africa for service. Ten have required operations in surgical homes, two for wounds of the knee involving artery or nerves or both, one for arterio-venous aneurysm of the femoral, one for severe fracture of the femur, two for loose cartilages in the knee-joint, one for appendicitis, and one patient has had fragments of lead removed from the thigh and scrotum, while three cases of amputation of the leg with stumps not healed, two cases of perforating wound of the chest and lung, and one case of gunshot fracture of the humerus with injury of nerve have been treated. One patient recovered after receiving five wounds one of which penetrated the abdomen. One patient was hit by four bullets, one of which fractured the left femur high up. He has been sent abroad. In the majority of cases of severe wounds the results of nervous shock have been marked and have in several instances lasted so long as to require rest and change before operation could be undertaken. Cases of injury to nerves have improved greatly under massage and change of air.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 6932 births and 3951 deaths were registered during the week ending June 2nd. The annual rate of mortality in these towns, which had increased from 17·8 to 18·4 per 1000 in the three preceding weeks, declined again to 17·7 last week. In London the death-rate was 17·0 per 1000, while it averaged 18·2 in the 32 provincial towns. The lowest death-rates in these towns were 11·0 in Gateshead, 11·1 in Croydon, 12·6 in Brighton, and 13·5 in Derby; the highest rates were 22·1 in Blackburn, 22·2 in Swansea, 22·8 in Halifax, and 25·5 in Plymouth. The 3951 deaths in these towns included 423 which were referred to the principal zymotic diseases, against 431 and 443 in the two preceding weeks; of these 142 resulted from measles, 115 from whooping-cough, 77 from diphtheria, 34 from diarrhœa, 29 from scarlet fever, and 26 from "fever" (principally enteric). No fatal cases of any of these diseases occurred last week in Norwich or in Gateshead; in the other towns they caused the lowest death-rates in Croydon, Brighton, Birkenhead, and Halifax, and the highest rates in Wolverhampton, Lercester, Derby, Blackburn, and Sheffield. The greatest proportional mortality from measles occurred in Plymouth, Cardiff, Derby, Blackburn, and Sunderland; from scarlet fever in Burnley; from whooping-cough in Wolverhampton, Salford, Oldham, and Huddersfield; from "fever" in Swansea; and from diarrhœa in Blackburn. The 77 deaths from diphtheria included 29 in London, nine in Leicester, nine in Sheffield, five in Birmingham, and four in Liverpool. No fatal case of small-pox was registered last week in any of the 33 towns. There were seven small-pox patients under treatment on Saturday last, June 2nd, in the Metropolitan Asylums Hospitals, and four new cases were admitted during the week. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 1759, against numbers increasing from 1647 to 1784 on the five preceding Saturdays; 194 new cases were admitted during the week, against 203, 221, and 216 in the three preceding weeks. Influenza was certified as the primary cause of 14 deaths in London. The deaths referred to diseases of the respiratory organs in London, which had declined from 417 to 269 in the four preceding weeks, further declined to 266 last week, and were 15 below the corrected average. The causes of 36, or 0·9 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Leicester, Salford, Leeds, Newcastle, and in 12 other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Halifax, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·7, 19·5, and 19·6 per 1000 in the three preceding weeks, declined again to 18·6 during the week ending June 2nd, but exceeded by 0·9 per 1000 the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 12·6 in Leith and 14·9 in Aberdeen to 20·7 in Glasgow and 23·6 in Perth. The 575 deaths in these towns included 25 which were referred to whooping-cough, 25 to diarrhœa, 16 to measles, four to diphtheria, one to small-pox, one to scarlet fever, and one to "fever." In all 73 deaths resulted from these principal zymotic diseases, against 85 and 76 in the two preceding weeks. These 73 deaths were equal to an annual rate of 2·4 per 1000, which was 0·5 per 1000 above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough, which had risen from 22 to 36 in the three preceding weeks, declined again last week to 25, of which 21 occurred in Glasgow, two in Aberdeen, and two in Perth. The deaths from diarrhœa, which had been nine, 15, and 19 in the three preceding weeks, further rose to 25 last week, and included 13 in Glasgow, four in Dundee, three in Aberdeen, and two in Edinburgh. The fatal cases of measles, which had been 19 and 10 in the two preceding weeks, rose again last week to 16, of which 14 were registered in Glasgow. The deaths from diphtheria, which had been seven and five in the

two preceding weeks, further declined to four last week and included three in Glasgow, where the fatal case of small-pox was also registered. The deaths referred to diseases of the respiratory organs in these towns, which had been 84 and 94 in the two preceding weeks, further rose to 104 last week, but were slightly below the number in the corresponding period of last year. The causes of 41, or more than 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 23·0 and 25·2 per 1000 in the two preceding weeks, declined again to 21·9 during the week ending June 2nd. During the past four weeks the death-rate in the city has averaged 24·1 per 1000, the rate during the same period being 16·5 in London and 18·5 in Edinburgh. The 147 deaths belonging to Dublin registered during the week under notice were 22 less than the number in the preceding week, and included three which were referred to the principal zymotic diseases, against nine and five in the two preceding weeks; of these, one resulted from scarlet fever, one from "fever," one from diarrhœa, and not one either from small-pox, measles, diphtheria, or whooping-cough. These three deaths were equal to an annual rate of 0·4 per 1000, the zymotic death-rate during the same period being 2·0 in London and 0·5 in Edinburgh. The fatal case of scarlet fever was the only one registered during the last 10 weeks. The deaths from "fever," which had been three and two in the two preceding weeks, further declined to one last week. The mortality from diarrhœa showed a decline from that recorded in recent weeks. The 147 deaths in Dublin last week included 29 of infants under one year of age and 36 of persons aged upwards of 60 years; the deaths both of infants and of elderly persons showed a decline from the number in the preceding week. Five inquest cases and five deaths from violence were registered; and 62, or more than a third, of the deaths occurred in public institutions. The causes of seven, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Deputy Inspector of Hospitals and Fleets E. R. H. Pollard to the *Victoria and Albert*. Surgeon S. T. Reid to the *Pembroke*.

VOLUNTEER CORPS.

Rifle: 4th Volunteer Battalion the Queen's Own (Royal West Kent Regiment): The undermentioned gentlemen to be Surgeon-Lieutenants: William Watson, Arthur Tresco Franklyn Brown, and Herbert James Bryan. 1st Herefordshire: Surgeon-Lieutenant James Neil Macmullan resigns his commission and is appointed Second Lieutenant (supernumerary). 2nd Volunteer Battalion the East Lancashire Regiment: Surgeon-Captain A. A. Watson to be Surgeon-Major and to remain supernumerary. 1st Volunteer Battalion, the Lincolnshire Regiment: Surgeon-Lieutenant-Colonel H. Wright is borne as supernumerary whilst serving with the Royal Army Medical Corps in South Africa. 19th Middlesex: Surgeon-Lieutenant J. J. Clarke resigns his commission.

VOLUNTEER MEDICAL STAFF CORPS.

The London Companies: Horace Stansfield Collier to be Surgeon-Lieutenant.

TRANSVAAL WAR NOTES.

The following officers were discharged from hospital to duty for the week which ended May 20th:—Royal Army Medical Corps: Major T. G. Lavie, Lieutenant C. S. Smith, Lieutenant M. H. G. Fell, Civil Surgeon Wynter, and Civil Surgeon Ashford. The following officers were discharged from hospital to duty for the week which ended May 18th:—Royal Army Medical Corps: Major A. Baird, Major R. Kirkpatrick, and Captain W. A. Ward.

A new infectious diseases block is being constructed in the grounds of the Military Hospital, Devonport, so that the whole of the existing blocks may be available for the wounded soldiers from South Africa.

Princess Christian will open a naval and military bazaar at Olympia on June 19th. Mr. Goschen, M.P., will perform an opening ceremony on June 20th, and the Marchioness of Lansdowne on the third (the closing) day. Among the patrons of the bazaar, which is in aid of the Princess Christian's Home for Disabled Soldiers and Sailors, are Her Majesty the Queen and the Princess of Wales.

The Princess Christian Hospital, which has been presented to the Natal Government by Mr. Alfred Mosely, a Bristolian, was formally opened at Pinetown on May 18th by Colonel Morris, the military commandant. The Bishop of Natal (Dr. Baynes) was also present. The hospital, which is only for military purposes, has received patients since the commencement of April and contains 200 beds, all of which are now occupied. Mr. Mosely maintains the hospital at his own expense for four months, the estimated cost of this being £25,000.

The s.s. *Cephalonia* arrived at Southampton from South Africa on the 3rd inst. She carried 418 invalids, who were admitted to the Royal Victoria Hospital.

TRANSVAAL WAR CASUALTIES.

LORD ROBERTS'S ADVANCE.

The following casualties are reported:—At Ladysmith, May 26th, Civil Surgeon Robert Irvine, from enteric fever; at Kheis, May 28th, Surgeon-Captain Dun, 5th Company Imperial Yeomanry, slightly wounded in leg; at Florida, May 29th, Lieutenant A. H. Benson, R.A.M.C., attached to Gordon Highlanders, slightly wounded.

ARMY MEDICAL SCHOOL, NETLEY.

Under orders from the Director-General A.M.S. a special examination was held in the Army Medical School, Netley, on May 29th, when the following surgeons-on-probation for the Royal Army Medical Corps were found duly qualified and were recommended for commissions as Lieutenants. They left Netley for Aldershot on Monday, June 4th: Mr. C. H. Carr, Mr. E. Bennett, Mr. F. P. Lauder, Mr. H. E. Weston, Mr. J. Tobin, Mr. A. C. Adderley, and Mr. G. E. Leary.

Correspondence.

"Audi alteram partem."

INDURATED LYMPHATIC CORDS.

To the Editors of THE LANCET.

SIRS,—In his interesting lecture on Primary Syphilitic Chancres Mr. Jonathan Hutchinson, jun.,[1] draws attention to the occurrence of indurated lymphatic cords in from 40 to 50 per cent. of cases of primary syphilis, the importance of which "is not mentioned in any published description." The frequency of these, associated with chancres at the furrow or at the inner aspect of the prepuce, is noted, while their diagnostic importance is questioned. Apart from these valuable statistics and observations may I point out that the late Mr. Henry Lee[2] devoted especial attention to the subject? He described mainly two conditions:—1. The suppurating non-infecting syphilitic sore, from which the poison may be traced to the suppurating bubo, "in the clearest way" along the absorbent vessels and which may inoculate them, producing a fresh inoculable sore or occasionally a small abscess. 2. "A similar series of phenomena may be observed in the affections of the lymphatic vessels accompanying an indurated primary syphilitic sore ..... noticed by Hunter in which a lymphatic vessel leading from the chancre appears like a cord extending along the back of the penis. Sometimes these arise from thickening of the prepuce in cases of gonorrhœa. In such cases, however, the prepuce is generally excoriated. ..... The cord can be easily pinched up between the finger and thumb. ..... The lymphatics in such cases arise from an excoriated and inflamed internal prepuce. ..... We have here an account of the specific adhesive inflammation as it affects the lymphatic vessels, and although mixed up in Hunter's description with the suppurating form of the disease yet has he given the distinctive characters of each

[1] THE LANCET, June 2nd, 1900, p. 1575.

[2] Lectures on Syphilis (Lymphatic Absorption), Lecture IV., second edition, 1862. Hunterian and Lettsomian Lectures, Ibid., Lectures VII. and X., 1870.

with his usual clearness and precision." Essentially regarding induration as indifferently affecting either the lymphatic vessel or gland rather than apparently attaching importance to locality of lesion he noted that the induration of the vessel is often in inverse proportion to that of the primary sore or gland and he thought if such induration appeared shortly after infection and remained its "existence would be a sign of the patient being syphilitic" or, in less marked form, the subject of re-infection.

I am, Sirs, yours faithfully,

Grosvenor-street, W., June 5th. JOHN A. SHAW-MACKENZIE.

"THE RÔLE OF EDUCATION IN THE PREVENTION OF TUBERCULOSIS."

To the Editors of THE LANCET.

SIRS,—In my letter in THE LANCET of June 2nd, on the Rôle of Education in the Prevention of Tuberculosis, p. 1614, line 6, in the second column, "womankind" should be "mankind." Mr. Adler recommends among moral "duties" the inculcation of the laws of public and personal hygiene to children under the headings (*a*) duty to one's (physical, emotional, and intellectual) self—e.g., cleanliness, temperance, and chastity, &c.; (*b*) duty to mankind—e.g., justice, charity, &c.; and (*c*) duty to society—e.g., citizenship, parental and filial ties, &c. It may be equally claimed that such instruction in physical well-being is called for as an aid to morality. Practical illustrations of the effect of foul air might be shown with advantage to education and other authorities. This might bring the desired pressure to bear, as wished by the National Association.—I am, Sirs, yours faithfully,

F. BUSHNELL,
Honorary Secretary, Devon and Cornwall Association for the Prevention of Consumption.

Plymouth, June 5th, 1900.

THE LATE DR. G. F. CROOKE.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow us room to state what has been done regarding the Crooke Fund? The total amount subscribed is £219 14*s.* 6*d.* This we are handing over to Mr. J. T. J. Morrison—who was fellow-resident with Crooke at Guy's—and Mr. Arthur H. Foster, solicitor, of this city, who was his personal friend as well as legal adviser. They have consented to act as trustees, and we have not thought it wise to limit their powers except by the general instruction that the money was subscribed on the understanding that it would be used for the nurture and education of Crooke's only child—a little boy.

We are, Sirs, yours faithfully,
(Signed) A. FOXWELL, Treasurer of the Fund;
GILBERT BARLING, J. T. J. MORRISON, Secretaries.

Birmingham, June 4th, 1900.

"DEATHS UNDER CHLOROFORM."

To the Editors of THE LANCET.

SIRS,—I have no intention of continuing this discussion. I beg to call attention to the fact that every point raised by Dr. Edmunds is fully dealt with in my report except the questions of albumin and sugar, both of which were absent.

I am, Sirs, yours faithfully,

Wigan, June 1st, 1900. GEO. MOWAT.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

Plague and Cholera.—Official Indian Reports.—Increase of the Famine.

THE plague epidemic is subsiding throughout India. The returns for the week ending May 5th show the total plague deaths at 1771, compared with 2498 in the previous seven days. The plague mortality has dropped in Bombay city from 448 to 350 (these are the official figures and serve for comparison, but they are very wide of the mark); in Karachi from 284 to 187; in the Bombay Mofussil from 699 to 501; in Calcutta from 343 to 252; and in the Bengal Mofussil from 505 to 359. Notwithstanding the importation of one or two cases it is satisfactory to note that the cities of Madras and Rangoon have so far escaped. The present year has shown a remarkable diffusion of the epidemic. For the present a lull in the storm may be expected, but the forecast points to a further development after a period of rest. So many of the previous epidemics have lasted six, seven, and eight years that it is too much to expect that the present one will terminate this year. Cholera is now the chief pestilence and it caused no less than 811 deaths last week in Ahmedabad. It is raging also in some of the famine districts. The "normal" average for Calcutta is over 100 a week and for the whole of India half a million lives have often been lost in one year. The figures for plague look very small when the ravages of this disease are noted. Enteric fever is very prevalent in Rangoon. A committee of inquiry is about to be appointed. It will probably consist of the civil surgeon, the municipal engineer, three private medical practitioners, and possibly an engineer of the Public Works Department.

The official history of the progress of the plague in the Bombay Presidency has been published. It was compiled under orders of the Government by Captain Condon, I.S.C. Long reports on the medical aspects and the treatment of plague are included in the volume. The astonishing feature of some of these Government reports consists in the appointment of the editors. In this case at least one would have expected to see the name of a medical man rather than that of an officer in the Indian Staff Corps. Such a report would probably be best produced under the joint editorship of a plague expert and an experienced administrative officer. Apart from the expected report of the English Plague Commission it is time that the numerous reports from all parts of India were consolidated. There is now an immense waste of paper, while important observations get hidden away in small volumes.

The number of persons on famine relief continues to rise and now amounts to 5,600,000, being an increase of 123,000 on the returns of the previous week. The Central Provinces and Bombay Presidency are in the worst plight. The loss of human life has been extraordinarily small but the stock of cattle in some districts has been almost wiped out. An attempt is being made to transfer cattle from other areas, and 5000 have been ordered by the Bombay Government. The stock of wagons on the railways is so insufficient for the ordinary demands of trade that some difficulty will probably be found in conveying them. The present famine is far greater than any of its predecessors. This year water and fodder have failed as well as the crops, and over a wide area in the Punjab and Rajputana fodder has been absolutely unobtainable. Horses have been taken to other districts, but the cattle have been left to die and they have simply perished by hundreds of thousands.

May 10th.

PLAGUE IN AUSTRALIA.

(FROM A SPECIAL CORRESPONDENT.)

THE returns of plague in Sydney for the week ending April 21st show the following figures: remaining at the beginning of the week, 62; admitted, 16; died, eight; remaining at the end of the week, 70. The totals were as follows: admitted, 129; died, 46; discharged recovered, 13. Total "contacts" isolated, 719; cases among "contacts," five (see ante).[1]

The fall in new cases from the 23, 29, and 29 of the three preceding weeks to 16 during that under review has vastly cheered the popular mind and has even been the occasion of congratulatory paragraphs in the public press. This decline may stimulate to fresh exertions, and the rôle of Cassandra persistently played is not without its dangers for the impersonator. It is quite plain, however, that the disease continues to occur solely in relation to diseased rats, that the latter are far from having been killed off yet, and that cases come from localities further and further from

[1] THE LANCET, May 26th, 1900, p. 1568.

the original focus—which, notwithstanding the cleansing, still furnishes some. As Simond has said, the disease spreads like a spot of grease on paper. In four or five cases the patient, infected in the city, has fallen ill at a distance—in one case 140 miles away, in another 40 miles away, and in the remainder in suburbs about ten miles off—but these occurrences have been without consequences. The "contacts," of course, were inoculated in all these instances. It begins to appear that the medical officer of health is as helpless as anyone when the disease is not merely communicable directly but also originates with one kind of animal and spreads by the agency of another (or of other) animals. He may not and must not, derive comfort from the reflection that notwithstanding all that has been said and done in recent years epidemic plague has everywhere pursued its course, and has hardly been interfered with by the most strenuous efforts. A few small and solitary villages furnish the sole exceptions.

The mortality represented by the above figures, low as it is, represents a strictly "natural" mortality, for, as stated at first, it includes all deaths which occurred before admission to hospital and before any treatment had been applied. Were these deducted the hospital mortality (without further deduction for patients who died within 24 hours of admission) would probably not be above 30 per cent. For this result it appears that Dr. A. E. Salter, in charge, is to some extent directly responsible. His attention to the patients has been really unremitting, and probably several lives have been saved by his timely injections of five-minim doses of the pharmacopœial solution of strychnine beneath the skin; these he repeats every hour, two hours, or less often, till the imminent danger of death from failure of the heart has passed. To carry out treatment on this principle successfully the physician must be ever at hand. During next month consignments of Yersin serum are expected, one from the Pasteur Institute and another from the municipal laboratory at Messina (Dr. Terni and Dr. Bandi). They will be welcome, but the usefulness of treatment by this method can be judged only from the results attained in long series of cases; nothing, in the present writer's opinion, can be deduced from individual experiences. Plague is the most deceptive of all diseases. There is no member of the medical staff who has not had to admit again and again that patients have recovered whom he thought certain to die, and to die soon, and that others whom he thought in little danger have died within a few hours of his forming that opinion of their case. Calmette and Salimbeni have said something of the same sort as a warning not to refrain from injecting serum with a view to saving it for more urgent cases, for the latter cannot be distinguished with any certainty. A lengthened trial therefore is necessary.

The inter-colonial plague conference, after holding three meetings in Melbourne, concluded their deliberations at a fourth meeting held in Sydney. New South Wales could not, of course, be officially represented under these circumstances, but the meeting was held at the Department of Public Health and the chief medical officer of the Government was present by invitation. The members spent much time in the laboratories, visited the hospital, and visited quarantined areas in the city in order to make acquaintance with the methods of cleansing employed. This is a considerable business, estimated to cost not less than £30,000 a month in wages and material. The public gauge the return for this expenditure in loads of refuse removed and the like; they have not yet learned that it should be expressed in terms of rats. Nevertheless, rats are being killed in greater numbers than heretofore.

April 24th.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Medical Benevolent Society.

THE seventy-eighth annual meeting of this society was held on May 23rd under the presidency of Mr. D. C. Lloyd Owen. The report read is of a very satisfactory kind and indicates the zeal and interest displayed in the society by the local officials. The invested funds now amount to £15,437, of which £6869 are invested in Birmingham corporation bonds and stocks. 16 annuitants were on the books at the beginning of the year. £467 had been expended in annual grants which ranged from £15 to £40. The number of members was then 384, 24 having been admitted during the year. The various officers were appointed and stress was laid upon the fact that so few members of the profession in the city and Midlands had joined the society, the advantages of which were so manifest. A dinner was subsequently held, at which a number of members and friends were present, and a pleasant evening was spent.

University of Birmingham.

The first meeting of the Court of Governors of the new university was held on May 1st. Mr. Chamberlain, as chancellor, presided. The Lord Mayor, Alderman Beale, was elected vice-chancellor and Alderman Clayton pro-vice-chancellor and treasurer. The first official act of the new chancellor was to invite the Court of Governors assembled under the authority of a Charter granted by the Queen to approve a loyal message congratulating Her Majesty upon the occupation of Johannesburg and Pretoria. The latter was a little premature, but subsequent events have realised the expectancy. Four members of the present Cabinet now hold the office of chancellor of a university. The energy and influence which Mr. Chamberlain has exercised in promoting the University of Birmingham have gone far towards developing this great scheme which is now an accomplished fact. The endowment fund now stands at £327,468. Although this sum exceeds the amount originally asked for it is now stated to be much below what is actually required, and another quarter of a million is sought. Time will show how far this great enterprise is to be a local or a national one, but if the hopes of its founders are to be realised a great and almost revolutionary model will be established to associate the progress of civil life with the industrial enterprise of a vast working community.

The Consultative Institution.

THE LANCET has already dealt in the issue of June 2nd with this subject in so far as it bears upon the medical profession and it remains to be seen how far the experiment will be successful or otherwise. The promoters express themselves as satisfied with the working of the first week and flatter themselves as to its ultimate result. The reasons adduced for the support of such a proceeding certainly do not appear sufficient to render it a justifiable one from a professional point of view. It is stated, for instance, that the class of people whom it is intended to benefit desire to have as a right what the profession would accord only as a favour, that is, in the diminution of a consulting fee to the sum of half-a-guinea. The questions of continued treatment, of operations, and of specialties, will become features which will involve much deliberation and care on the part of the promoters; the one medical gentleman who presides over the whole range of diseases and complications may find his position by no means an easy one.

June 5th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Horse Ambulances.

A DEPUTATION from the Medical Charities Committee of the city attended the meeting of the Watch Committee of the Manchester Corporation on May 24th to give reasons for the provision of horse ambulances. Mr. Alfred Simpson, chairman of the House Committee of the infirmary, said that in January last, on the advice of Professor D. J. Leech, the question was brought before the members of the Red Cross Society and a resolution was passed inviting the municipal authorities to provide horse ambulances and the resolution had been approved by the Sanitary Association of Manchester and Salford. Liverpool and other places in this country and various towns in America are far better provided as regards ambulance service than is Manchester. Mr. Alderman Rawson, chairman of the committee, assured the deputation that the committee were in sympathy with them and that a special sub-committee was already in existence for the purpose of considering the whole question. We may therefore hope that before long Manchester will not be thought lagging behind in the matter.

Manchester Water-supply.

At a meeting of the Waterworks Committee of the Manchester Corporation held on May 24th there was a discussion on the water-supply. The drought of last summer

put a considerable strain on the department. There has been no great rainfall since, and the demand for water increases so rapidly that the need for a larger supply is forcing itself more than ever upon the committee. An additional pipe two miles in length at Longdendale, to utilise flood water which now escapes, has already been decided on, but that will not meet the requirements of the near future. The committee, therefore, have decided to put before the Council the question of laying a second pipe from Thirlmere to Manchester. The cost is estimated at between £400,000 and £500,000.

Pollution of the Manchester Ship Canal.

The people of Grappenhall, through their parish council, have been praying the Cheshire County Council to deliver them from the grievous nuisance caused by the present condition of the Manchester Ship Canal, and have asked them to "take steps to abate the excessive obnoxious smells arising" from it. The vice-chairman of the Council (Mr. T. W. Killick) was not surprised that there was some annoyance at the delay in the purification of its waters. The Mersey and Irwell Joint Committee have been working for nine years with little apparent result, though it may be conceded that in some directions progress has been made—e.g., cinders and other solids are now kept out of the stream. The report of Mr. Tatton, the chief inspector, stated that "the manufacturers in the watershed had nearly all of them done their best to render their effluents innocuous. Considerable progress has been made in dealing with the local authorities, but it is not flattering to the self-complacency and tender sensitiveness of Manchester to hear that while some of the Cheshire authorities were behindhand in the work of purification "the winner of the wooden spoon was, of course, the Corporation of Manchester." A year ago the corporation was taken into court and Manchester was fined and promised "to amend its ways." The Rivers Committee of the Manchester Corporation have a sewage scheme, but it has not yet been sanctioned by the Local Government Board, and the Joint Committee are asking for a definite reply from the corporation "as to the steps they intended to take." Perhaps the court may see them again. But a faint hope was held out to the sufferers along the canal, for Mr. Killick thought there was "a possibility" that those who lived on the banks of the Manchester Ship Canal and its tributaries "would in the next year or two find a great reduction in the noxious smells of which the Grappenhall Parish Council complained." It seems a marvel that smells so strong and so vile can be produced, and a still greater marvel that they can be endured and that they kill so slowly.

June 1st.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Royal Southern Hospital: Appointment of an Honorary Physician.

THE vacancy in the honorary staff of the Royal Southern Hospital caused by the retirement of Dr. John Cameron, the senior physician, has been filled by the appointment of Dr. Charles J. Macalister, physician to the Stanley Hospital. The elections to the honorary medical and surgical posts at the Royal Southern Hospital are carried out under the system which formerly prevailed at the Royal Infirmary and the Northern Hospital, where the electors comprised all subscribers of one guinea and upwards. In the case of the Royal Infirmary the limit was two guineas. Election committees, varying from 80 to 100 members, chosen from the subscribers at the annual meetings, have been established at the latter two hospitals and have been found to work in a most satisfactory manner. It is somewhat surprising that the Royal Southern Hospital has not followed the examples set by the Royal Infirmary and the Northern Hospital, where the old system was found to be both unwieldy and involving unnecessary expense to intending candidates. During the recent contest many subscribers to the funds of the Royal Southern Hospital took exception to being canvassed on behalf of the candidates, urging as a reason that they were not qualified to judge of the merits of the respective candidates and that the election ought to be in the hands of a special committee appointed by the subscribers for the purpose. I am informed that the electorate at the Royal Southern Hospital consists of about 1200 subscribers.

The Select Vestry and the Joint Committee on Tuberculosis.

At the last meeting of the select vestry four members were selected to serve until April 30th, 1901, on the joint committee for the provision, fitting up, furnishing, and maintenance of a hospital for the treatment of paupers suffering from tuberculosis pursuant to the order of the Local Government Board of April 5th, 1900. Miss Thorburn, one of the lady members of the select vestry, drew attention to the fact that as half the patients in the proposed hospital would be females the experiment would not be carried out under the most favourable circumstances unless the ladies were permitted to assist in the management of the hospital. She was not, however, now prepared to move an amendment to the proposed names inasmuch as the work of the committee for the next 12 months would be chiefly connected with buildings and matters in which ladies could not be of any particular assistance. She wished to give notice that on the occurrence of a vacancy on the committee later a lady would be proposed. The lady members of the select vestry have performed their duties as guardians of the poor in an unobtrusive and exemplary manner and it would appear that Miss Thorburn's request is a reasonable one to which no valid objection can be offered.

The Adulteration of Margarine and Cream with Boric Acid: Prosecutions at the Police Court.

The Liverpool stipendiary magistrate imposed a fine of £20 and £5 5*s.* costs upon a local tradesman for adulterating margarine with boric acid. On behalf of the prosecution Professor Boyce of University College said that the only interpretation he could put upon the quantity of boric acid used in the present case, which amounted to 0·73 per cent., or 51 grains to the pound, was that it was used to mask rancidity. Three medical gentlemen, together with Mr. Davies, an analyst, gave evidence for the defence to the effect that boric acid was not injurious to health, a theory which was strongly controverted by Professor Boyce, who had found from experiments upon kittens that boric acid when added to milk had produced in the animals violent diarrhœa and had caused emaciation. Mr. Stewart, in giving his decision, said it was sufficient for him that the introduction of boric acid was contrary to law. It was to the interest of the public to obtain a pure article, and it should not be possible to put on the market an article which otherwise could not be sold. Two other tradesmen were fined 20*s.* and costs each for adding boric acid to cream. In all three cases notices of appeal were given.

The Foul Atmosphere of the City Police-court.

The vitiated atmosphere of the Dale-street Police-court has been a constant source of complaint by magistrates and solicitors whose duties compel them to remain in the court for hours. Last week Mr. S. Quilliam, a solicitor practising in the court, addressed the bench on the subject and described the atmosphere as simply poisonous. The late Mr. T. Stamford Raffles, who had filled the post of stipendiary magistrate for a considerable number of years, bitterly complained of the foul air which he was compelled to breathe. The construction of the court must be seriously at fault so far as its ventilating properties are concerned, as the officials have done everything possible to keep the place ventilated with the means at their disposal.

A Liverpool Surgeon Wounded in South Africa.

Intelligence has reached Liverpool that Dr. R. Craig Dun, the honorary surgeon of the Children's Infirmary, who volunteered for the front and accompanied the 2nd Battalion of the Imperial Yeomanry as one of their medical officers, had been wounded at Draghoender, near Prieska. Happily, the wound received in the leg by Dr. Dun is not serious. His friends in Liverpool will be pleased to hear that the latest intelligence reports him to be progressing satisfactorily.

June 5th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Legacy to the Edinburgh Royal Infirmary.

THE late Mr. David Tinslie of Costerton, Mid Lothian, has by his will left the residue of his estate, after paying a few personal legacies, to his trustees to accumulate for 15 years, and thereafter to build, endow, and maintain with the

money a convalescent home in connexion with the Edinburgh Royal Infirmary. The residue of the estate, it is expected, will be worth between £200,000 and £300,000. He directs that the home should be named the "Astley-Ainslie Institution" in memory of his late nephew Mr. John Astley-Ainslie, son of the late Mr. John Ainslie of Huntington, East Lothian. The trustees are empowered to buy ground to an extent suitable for the hospital, with garden, policies, and recreation ground around it. It is also stipulated that the deeds necessary for the carrying out of this purpose shall be prepared by, or in the sight of, such person or persons as the judges of the Court of Session in either of its divisions shall appoint, and the deed has also to be submitted to, and approved of by, the Court.

Health and Sanitary Condition of Aberdeenshire.

The report for the year 1899, which has just been issued by Dr. James P. Watt, medical officer of the county of Aberdeen, shows that the total number of births registered in the eight districts of the county was 3431, or 28·3 of the estimated population (excluding burghs) of 121,260, while the total number of deaths reported was 1653, or 13·6 per 1000. The death-rate in the different districts, when calculated out, varied as follows:—Deer district, 15·1 per 1000; Ellon, 9·8; Garioch, 15·3; Deeside, 12·4; Turriff, 17·3; Aberdeen, 13·9; Alford, 12·8; and Huntly, 10·2. The mean temperature at the different meteorological stations, it may be mentioned, ranged from 43·5° to 47·0° F., and the rainfall for the year from 20·87 inches to 35·58 inches. During the year 814 cases were intimated under the Infectious Diseases (Notification) Act, 1889, as against 1019 for the previous year—viz.: diphtheria, 122; erysipelas, 166; scarlet fever, 412; and enteric fever, 114. Of the 814 cases 300 were removed to hospital, there being now accommodation in all the districts. Of the 412 cases of scarlet fever reported (229 fewer than in the previous year) only three died, and there was no extensive outbreak of enteric fever, the cases happening either singly or in small groups. The drainage and water-works of all the villages are reported to be "good" or "fair," and scavenging has improved in all the districts except Aboyne, Torphins, and Braemar, where "nothing has as yet been done."

University of Aberdeen.

The Senatus having inquired into certain riotous proceedings by medical and other students at Marischal College on May 21st, during which Herr Hein, lecturer on German, was assaulted on account of supposed pro-Boer opinions, have reprimanded 16 students altogether, two of whom have also been fined 5 guineas each and three others 3 guineas each. The committee of the Senatus report that they strongly condemn the conduct of the students in their attack on a teacher of the University as being disgraceful and incapable of justification, and that such conduct should not be passed over without due punishment. At the same time the committee record their "desire to bear in mind that the students were actuated by a strong feeling of loyalty which made them resent in their own way what they regarded as an insult to Her Majesty, and that this feeling had been much intensified by recent events." Further, the Senatus, "having regard to the disorderly conduct of certain students at the recent graduation ceremony, has imposed modified fines of two guineas and one guinea on two students who were convicted of such conduct and of giving false names." The Senatus, it should be mentioned, disapproved of Herr Hein's conduct in the exhibition to his class of a cartoon disrespectful to the Queen. The general body of students have subscribed the fines imposed.

June 4th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal College of Surgeons in Ireland.

OWING to recent circumstances in connexion with the election of President the annual meeting for the choice of the new officers of the Royal College of Surgeons which took place on June 4th was viewed with more than usual interest. Mr. W. Myles was elected President without opposition. Mr. L. H. Ormsby, surgeon to the Meath Hospital, and Mr. F. T. Heuston contested the vice-presidency, for which the former was elected by a considerable majority. The following is a list of the other officers of the College:—Honorary Secretary: Sir Charles Cameron, C.B. Council: Dr. A. H. Jacob, Sir Philip Smyly, Sir William Stokes, Mr. H. R. Swanzy, Mr. E. H. Bennett, Sir Charles Cameron, C.B., Dr. A. Meldon, D.L., Mr. C. B. Ball, Mr. R. L. Swan, Sir William Thomson, Mr. J. B. Story, Mr. J. Lentaigne, Mr. A. Chance, Mr. J. J. Cranny, Mr. R. D. Purefoy, Mr. H. G. Sherlock, Mr. R. B. McCausland, Mr. G. Stoker, and Mr. F. Conway Dwyer. It will be noted that some changes have taken place in the *personnel* of the Council. Mr. Graves Stoker is a new member of Council. Mr. William Stoker, who was a member of Council last year, recently accepted the post of Examiner in Surgery, while Mr. Conway Dwyer, who filled that examinership last session, has now become a member of Council.

Royal Medical Benevolent Fund Society of Ireland.

The annual meeting of the Royal Medical Benevolent Fund Society of Ireland was held on June 4th at the Royal College of Physicians, Kildare-street. The chair was occupied by the President of the College, Sir John W. Moore, and there was a representative attendance to whom the report was submitted.

The Able-bodied Pauper.

One of the great blemishes of the Irish Poor-law system is the number of paupers all quite able to earn their own livelihood who crowd the workhouses. Some time ago it was decided to have a parade of able-bodied paupers residing in the Belfast workhouse, when it was found 600 were on the roll; now these have been reduced to 75, through the influence of the guardians getting them remunerative employment, and in part owing to the war. The number now are not sufficient to do the duties about the place, and it is proposed to give each man volunteering to work two ounces of tobacco weekly.

The Ulster (Benn) Eye, Ear, and Throat Hospital.

The twenty-ninth annual meeting of the supporters of this hospital was held in the board-room of that institution in Belfast on May 30th. In the report submitted it was stated that in 1899 there were 1704 patients treated in the hospital, and of these 286 were intern cases. The total receipts of the hospital from all sources amounted to £729 15*s.* 2*d.*, and the expenditure to £791 17*s.* 1*d.*, so that there is a loss on the working of the hospital for the year of £62 1*s.* 11*d.* The committee have decided to increase the charge per week for intern patients from 10*s.* to 15*s.* Were it not for the Benn endowment and building funds, which amounted to £8000, it would be impossible to keep the hospital going under an additional expense of £300 or £400 a year, so that the greatest care is taken to keep down expenditure in every department of the hospital.

The Typhoid Fever Epidemic in Belfast.

I regret to report the continued prevalence of typhoid fever in Belfast. It may for convenience be called an epidemic, but it is really simply an exaggerated condition of what unfortunately is now a normal condition in Belfast. Between April 22nd and May 19th 177 cases of typhoid fever were notified. As to the cause of the present outbreak it is most difficult to say. It would appear that the largest number of cases occurred in the neighbourhood of the Crumlin and Shankhill-roads (No. 3 and No. 10 districts), though the houses are comparatively recently built, generally in good sanitary condition on an elevated site, and the streets are wide and airy. The districts in Belfast which are most free from the disease are No. 1 and No. 5 (the Dock and Brown-square districts), and in these are some of the worst alleys and oldest houses in the city. This would seem to show that absence of fresh air and the presence of old and badly constructed houses have nothing to do with the present epidemic. Then, again, on the theory that the disease is water-borne it does seem strange why certain parts of the city are affected and not others supplied from the same source. Thus 19 out of the 57 cases notified last week occurred in Shankhill Ward. No wonder it was stated in the city corporation that the Public Health Department "was at its wit's end to find the cause of the outbreak of typhoid." Further, the state of the rivers and dams in the district is blamed by some as the cause of the outbreak and steps are being taken to make them clean. For the four weeks ending May 19th there were 64 deaths from zymotic disease, while in the corresponding period of last year there were 51. The death-rate from zymotic diseases was 2·3,

while the mortality from the same cause was for the corresponding period of 1899 only 1·9 per 1000. Scarlet fever is still prevalent, but as showing the mildness of this zymotic there have been no deaths. One of the Belfast papers calls special attention to the fact that the public officer of health reports that for the four weeks ending May 19th six cases of puerperal fever were notified. At the last weekly meeting of the Belfast Board of Guardians Dr. E. Coey Bigger, physician to the Fever Hospital, applied for additional temporary nurses, to cope with the increased number of typhoid fever patients who have recently been admitted. The present staff are overworked.

The Milk-Supply of the City of Belfast.

At a meeting of the City Council of Belfast on June 1st, Sir Otto Jaffe (ex-Lord Mayor) moved that it be an instruction to the Public Health Committee to collect information as to the supervision of the milk-supply in municipalities in the United Kingdom, America, and on the continent, particularly in regard to pasteurisation, &c., and that this information when collected be printed and furnished to the members of the council. There can be no question that in reference to the supervision of the milk-supplies of cities in the United Kingdom we are, with few exceptions, very much behind the municipalities on the continent and in America. There is here really no adequate supervision of the production of milk by boards of health such as prevails now in the majority of the States of North America, where authority is exercised in stamping out infectious disease prevalent among cows and in inducing a better management of cowhouses and dairies. In very few cities in the United Kingdom can certified milk be procured—that is, milk obtained from dairies where a committee consisting of physicians, pathologists, veterinary surgeons, and chemists certify after careful examination as to the general condition of the dairies. We are also far behind American cities in being able to obtain a supply of milk suited in its proportions to the different ages and digestive condition of infancy. Sir Otto Jaffe is moving in the right direction.

Irish Boards of Guardians and their Medical Officers.

The friction between the boards of guardians in Ireland and their officers—the dispensary doctors—still continues. Here are two recent cases:—Mr. J. J. Todd applied to the Omagh Board of Guardians for £3 3*s.* for acting as locumtenens for Mr. C. Hunter of Carrickmore who was subpœnaed to Dublin as a Crown witness. The board had refused to pay on the grounds that their medical officer should pay his own substitute, and the matter is now left to the Local Government Board to settle. At the meeting of the Omagh Guardians on June 2nd the chairman said he thought Mr. Todd was entitled to his money, but he alleged that an irregularity was committed by Mr. Hunter going off without any permission from the board of guardians or sanction of the Local Government Board. Mr. Hunter, however, replied that he acted strictly in accordance with the rules of the Local Government Board because in the face of a summons which said, "Fail not on your peril," it was not necessary to apply to the guardians. He had simply to apply to the relieving officer and he it was who appointed a substitute to do the work. It was decided to call the attention of the Local Government Board to the action of Mr. Hunter in leaving the district without the permission of the guardians. Again, in Ballymena, Mr. R. Currie, medical officer of health, applied to the guardians on June 2nd for leave of absence for seven days, nominating as his substitute Dr. W. R. Davison. Mr. Currie stated that he intended to apply for holidays later in the season. The guardians unanimously agreed that their board do not allow more than seven days as holidays to their dispensary medical officers in the year. Further, they decided to let Mr. Currie have the seven days on the understanding that these were all the holidays which they would give him this year unless he provided a substitute at his own expense, and they would only pay Dr. Davison at the rate of 2 guineas per week. All this unfortunate friction has arisen through the Local Government Board making a rule so ambiguous that its interpretation was doubtful. It is rumoured that in the course of the next ten days they will issue a new set of rules and in doing so they might remember a dictum laid down by the hero of Mafeking in his book "Aids to Scouting," which is as follows: "The secret of getting successful work out of your trained men lies in one nutshell—in the clearness of the instructions they receive." If the Local Government Board will simply state what is the length of the holidays for dispensary medical officers and what is the payment for their substitutes all this wrangle will cease. It is incumbent on them to make their rules clear and devoid of all ambiguity alike in the interests of the guardians and of their medical officers.

Charitable Bequests.

By the will of Mr. G. Washington Charters, who for a long time resided in Belfast, £5000 have been left to the endowment fund of the Royal Victoria Hospital and £1000 have been bequeathed to the Belfast Hospital for Sick Children.

June 5th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Solidarité Universitaire.

THERE has recently been founded, under the name of "Solidarité Universitaire Société d'Assistance Mutuelle des Étudiants Français et Étrangers," an association the aim of which is to assist students both past and present who have studied at higher educational establishments both in France and abroad but who are resident in Paris. The society proposes to find for its clients work suited to their particular form of study, such as translations, analyses of various works, bibliographical researches, *précis*, and similar work. The society comprises four classes of members—active members, givers of donations, founders, and honorary members. It is an interesting association and deserves encouragement.

Opening of the Pasteur Hospital.

A new hospital has just been opened in Paris under conditions which make a real landmark in the medical world. The actual official opening of the hospital has not taken place, for at present only one of the two blocks is in working order, but it is hoped that the other block will be ready by the month of July and that the foreign medical men attending the various Medical Congresses will be able to admire the hospital as a whole. The hospital is devised upon an altogether new plan and apparently is a realisation of the most perfect type of this kind of building at present existing. The funds necessary for its erection were offered to Pasteur some days before his death by an anonymous benefactor, and one of the last joys of that great man was to learn that a dream of his life was about to be fulfilled. The hospital stands in the rue Vaugirard, No. 213, upon a large plot of land facing the Pasteur Institute. That portion of the site which looks on to the rue Dutot is occupied by the great Institute of Biological Chemistry which was built out of a legacy left by the Baroness Hirsch and which is presided over by Professor Duclaux. The buildings of the new hospital are characterised by a feature all too uncommon in France—namely, a special fitness for the purpose for which they are intended. The architect is M. Florent Martin, a brother of Dr. Martin, assistant director of the Pasteur Institute, who, together with Dr. Roux, has given the minutest attention to all the details. The buildings consist of a number of isolated blocks connected by underground corridors. In the part looking on the rue de Vaugirard there is to the right a consultation block containing also quarters for the staff; to the right again is a small block destined for the lodging of the medical superintendent. In the middle of the site are two large blocks, identical in aspect, connected by a winter garden and a garden for the use of the patients. On the left the whole length of the site is occupied by a large block given over to general wards and disinfection rooms, while to the right at the back of the wards is an anatomical theatre. When a patient applies for entry to the hospital he goes through the consulting room into one of the six isolation rooms on the ground floor where he is examined by the medical officer who decides as to whether the malady is infectious or not. If it is the patient is shown into a special room called the *chambre d'entrée* and the isolation room out of which he goes is promptly disinfected. In the *chambre d'entrée* he strips completely and has a bath or a douche if there be no indication to the contrary. He then puts on hospital clothing and is put to bed in a bed which is wheeled or taken in a lift to another isolation room

in the block allotted to contagious cases. The *chambre d'entrée* is then disinfected and the patient's clothes are stoved. Each block contains 24 rooms with one bed, two wards for convalescents with 12 beds, and five wards with two beds each for such cases as where, for instance, the mother of a diphtheritic patient is unable to leave her child. In all, therefore, there are 53 beds. The floor of each ward is paved with stoneware tiles (*grés ecrum*) and the walls also are covered to a height of 10 feet with tiles. The upper portions are glazed except on one side where the wall is double and contains all the pipes necessary for the supply of hot and cold water, hot air, ventilating tubes, gas pipes, and those in which the wires for the electric light run. By this means all the pipes can be easily got at while they do not show within the room. To each room there are two doors, one of which opens on to a central corridor and the other on to a balcony. By the latter the patient's wants are supplied when he is isolated completely. The furniture is very simple and comprises an iron bedstead and an iron table with a marble top. The air space of each room is 39 cubic metres instead of the regulation 30. If the patient is not considered infectious on his admission he goes to the usual consulting-rooms which comprise a medical officer's room, a room for surgical dressings, a bathroom, and three rooms with one bed each. There is also a little laboratory for clinical, chemical, and bacteriological examinations of urine, false membranes, and the like. As a whole the new hospital unites the isolation of the patient in its greatest degree with the greatest simplicity of procedure. The staff consists of one medical superintendent, one resident medical officer (*interne*), 17 sisters, a steward, and a manciple who looks after the catering. The medical superintendent, Dr. Martin, is, for the first time in a French hospital, supreme, except that he has once a year to send a report to the committee. Owing to this fact it is hoped that the usual differences of opinion between the medical officer and the director will no longer exist. The hospital will treat patients whether rich or poor gratuitously, they being admitted in the order of their applications as soon as there is a vacant bed. No serum therapy will be employed except with such sera as have already been established as of use. At present in the one block which is open only diphtheritic patients will be treated and persons bitten by mad animals who cannot be treated outside either because they are too poor or because they have developed hydrophobia during treatment. The opening ceremony was private, there being only present Madame Pasteur, the medical officers of the institute, the architects, and the workmen. After a luncheon the representatives of the press were conducted through the buildings and an oration was delivered by M. Duclaux.

Anti-alcoholic Measures in the Navy.

The Naval Minister has just decided to follow the example set by the Minister of War who, as I said in a previous letter, has absolutely forbidden the sale of drinks in barracks. M. Lanessan, however, has not been bold enough to go so far and instead of forbidding the sale of drink has contented himself with issuing edicts for its regulation. He recommends that all commanding officers should get rid of all drinks which are known to be harmful, such as absinthe and liquor known to be of inferior brands. The daily consumption is not to be above a certain maximum which will depend upon the number of the men on board and especially upon the number of time-expired men who have re-enlisted. These regulations are simply a farce and will produce no effect. The Minister has merely shirked his responsibility in face of the outcry of the Academy of Medicine and of those whom the enormous development of alcoholism in France rightly makes uneasy. Commanding officers cannot possibly brand any particular kind of drink as inferior without laying themselves open to an action for damages by the manufacturers. Finally, the recognition of the right of an old hand to toleration in this matter because he has contracted drinking habits abroad is ludicrous.

Treatment of Pneumonia by Brewers' Yeast.

Brewers' yeast which has given such good results in the treatment of furunculosis is undergoing the lot of all valuable drugs and is being gradually recommended for every disease. It is now many years ago that in France Dr. Backer, putting into practice the theories of Pasteur as regards infection by fermentation, brought forward what he called the medicine of ferments, and treated a great number of diseases by injecting under the skin pure cultures of brewers' yeast. According to him diabetes, cancer, and even tuberculosis were all amenable to this remedy. The researches of M. Brocq, which confirm those of many of the older physicians in the north of France, have shown that in brewers' yeast there exists a substance which exerts a specific influence upon tuberculosis, while M. Thiercelin has met with great success by its employment in the "green diarrhœa" of infants. Other trials have been made with this substance in the treatment of diabetes. At the meeting of the Hospitals Medical Society held on May 18th M. Marie related many successful instances of the employment of yeast in cases of ordinary pneumonia. He was led to try it owing to no preconceived theory, but purely empirically. M. Marie had under his care an old man, aged 68 years, who was not only suffering from a severe attack of pneumonia, but also from very grievous boils. To cure these last M. Marie prescribed yeast and was surprised to see that the pneumonia which he had thought would prove fatal immediately began to resolve. Thinking that this was a simple coincidence M. Marie treated seven other cases of pneumonia with yeast, and they all terminated favourably, the same result being obtained whether the pneumonia was lobar or lobular. M. Marie, however, considers that eight cases are not enough to form an opinion as to the value of the method since the disease in which it was tried often gets well of itself, and in any case the mortality is under 10 per cent. He considers, however, that the results are worthy of attention, for in four of the cases the prognosis was most grave, and there certainly seems to be something more than a simple coincidence.

June 5th.

SWITZERLAND.

(FROM OUR OWN CORRESPONDENT.)

Trachoma in Switzerland.

DR. C. BAUER, Professor Haab's clinical assistant at Zürich, has written a report upon this disease, which is very rare in Switzerland. Out of 65 000 ophthalmic cases registered from 1862 to 1899 he could only find 153 cases. As 137 of these were foreigners, and those mostly Italians, there were only 16 cases of Swiss patients, some of whom had imported the illness. Owing to the influx of Italian workmen in the last few years to Zürich there were annually some 20 cases under treatment, as the 9000 Italian workmen formed a good percentage of the inhabitants of the town of Zürich, the population of which town was 165,000. The fact that these men congregate together and mix very little with the German-Swiss population explains why the cases of trachoma among the inhabitants have not increased. Prophylactic measures are, however, to be put into action to prevent any possible spread of this dangerous affection.

Iodine Preparations.

Professor Goll, lecturer on Pharmaceutics at the Zürich University, has published a *résumé* on this subject. He mentions the discovery of iodine by Courtois in 1811 and the publication of Cointet in 1820 on the treatment of goitre. Lugol in 1831 and Wallace in 1836 specially promoted the use of iodine in syphilitic affections. Acute iodism which occurs in 10 per cent. of all cases can sometimes be averted or the attack shortened by a daily dose of up to half an ounce of bicarbonate of soda. Professor Goll mentions the newest iodine preparations which can be employed with the slightest risk of iodism—the "eigons" containing from 14 to 20 per cent. of iodine in an albuminous form, the "iodalbacid" of Dr. Gans of Frankfort (10 per cent), and the "iodipin" of Dr. Winternitz (Prague), an oily solution of execrable taste but of prompt action and therefore recommended for gluteal injections which are reported to be painless. In cases of tapeworm he advises a solution of three grains of iodine in 50 grains of iodide of potassium and four ounces of water in doses of from four to five tablespoonfuls a day.

School Hygiene.

The first meeting of the newly founded society for school hygiene, which counts many medical men among its members, will be held at Zürich on June 9th and 10th in connexion with a hygienic exhibition. There will be some

interesting lectures by competent medical men, sociologists, and hygienists on Destitution from a Medical Point of View, the Construction of Floors, Walls, and Ceilings in Schoolhouses, and the Results of Holiday Outings in the Mountains for Weakly School-children.

Zürich, May 30th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Mosquitoes and Malaria in Arabia.

Dr. Armand Ruffer and Dr. Innes have just returned from an excursion to Mount Sinai and in passing Wady Ferran to the north of Sinai the latter found the larvæ of an undetermined kind of anopheles which strictly resembles some previously found in malarial parts of Egypt. He heard from the Bedouin that many of the inhabitants of this Wady suffered from fever and he saw some of them with enlarged spleens. Moreover, the Bedouin told him that the mortality of the neighbourhood had only become great since 20 years ago, when the Wady was transformed into a marsh. This statement was borne out by the recent growth of the cemetery. Malaria and anopheles larvæ were also observed at Tor which is now full of pilgrims returning from the Hedjaz, some with small-pox and dysentery, but being on the whole singularly free from plague. The object of the expedition was achieved, which was to collect insects, snakes, lizards, birds, and small mammals for the British Museum.

Plague in 1853 and in 1900.

It has always been a wonder how it was that plague suddenly died out of Egypt in 1844 after being present every spring for 20 years. A thesis dated 1853 which has just fallen into my hands shows that the subsidence was much more gradual. The writer was a Frenchman, Dr. Cuny, who had lately served the Egyptian Government as chief sanitary inspector of Middle and Upper Egypt. He says that plague had never ceased to be endemic in Egypt, and that every year many sporadic cases were seen both in the Delta and on the Upper Nile. He cites one case out of many seen in Cairo in April, 1853. The disease is described as a fever occurring every spring always with swollen glands and rarely with abscesses, sometimes endangering life but more often so mild that patients could go back to their work after a few days' rest. In 1850 he saw plague in several villages and counted 10 cases in one village alone, but one of the Government vaccinators was nearly dismissed for putting his chief upon their track. The native doctor of Samalout excused himself for not reporting the existence of plague in a rich townsman by saying that he would certainly be assassinated if the dreaded land quarantine were imposed. Another native doctor under Dr. Cuny was dismissed from his post by the central authority because he had announced some cases of sporadic plague. The people buried their dead secretly in their houses, mosques, or churches, and feared more than the plague itself the quarantine measures and the insatiable avarice of the sanitary officials. It appears that Dr. Rossi at this time was dismissed from the Viceroy's service because he had reported a sporadic case of plague near Cairo, and this was by no means a unique case. Whether the disease existed in Egypt after 1853 I do not know, but there is at present no evidence of even sporadic cases between 1853 and 1893. Customs have now happily changed and the sanitary department of to-day is always reminding its officials that in the springtime plague must never be forgotten. At Port Said the total number of cases to date has been 30, of which 13 have been fatal, while at Alexandria there have so far been six cases including four deaths. The consular authorities in both towns are working well with the sanitary officials and there is now practically no obstruction among Europeans and natives, both of whom go willingly to hospital. Another satisfactory sign is that for some days there have been no deaths occurring outside the hospital and everything tends to show that the Port Said outbreak is being cleverly kept in check. The rubbish of all of the dirty houses in Port Said is being carted away in sacks to be burnt with petroleum, and an interesting proof of the value of this precaution has just occurred. One of the men in charge of the destructor, in spite of warnings, insisted on working with naked feet and legs. In a few days he was admitted to the plague hospital with typical inguinal buboes, apparently contracted directly from the rubbish. There have been some suspected patients in other parts of Egypt, but none have borne the test of examination. The three bacteriologists, Bitter, Symmers, and Gottschlich, are all busily employed in testing doubtful cases.

"Bulletin Quarantenaire de la Semaine."

Under this heading the quarantine department in Alexandria publishes every week all news relating to plague, cholera, yellow fever, cattle-plague, and foot-and-mouth disease. The information extends to many distant countries. Plague is reported from Jeddah, Lahidj in Arabia, Bombay, Calcutta, Karachi, Hong-Kong, Australia, Japan, Rio de Janeiro, and Buenos Ayres. Bombay and Calcutta alone are responsible for cholera, while yellow fever is known at Panama, Havana, Santos, Mexico, and Brazil. Of the returning pilgrims from the Hedjaz, 291 have now been treated at the Tor Hospital, of whom 107 died from *maladies ordinaires* and 184 were cured. The chief disease is dysentery.

Vaccination Institute.

The experiment tried for the first time this spring of re-vaccinating the adult population has succeeded well and crowds of natives have swarmed to the various sanitary officers to be protected from a disease which they all know and fear. More than 200,000 people have been operated on, mostly in Cairo. The institute continues to improve and to supply excellent lymph. The latter is now mixed in the following proportions—lymph, one part; glycerine, two parts; and water two parts. Better results have been attained since the pulp is passed twice through the crushing machine and since the tubes are regularly kept at a temperature of 60° F. Each buffalo calf provides sufficient lymph with economical management for vaccinations varying in number from 12,000 to 22,000.

Cairo, May 21st.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

The Plague.

IN Sydney the plague has become firmly established and the number of persons attacked continues daily to increase in spite of vigorous measures on the part of the health authorities. The total number of cases of plague reported up to April 27th was 151, and 53 patients have died. Of those who succumbed 13 died at their own homes, nine in the metropolitan hospitals, and the remainder in the quarantine hospital. All were interred in the quarantine grounds with due precautions. At the quarantine station are also isolated 262 persons who have been "in contact" with plague cases. Professor Anderson Stuart in a lecture delivered recently estimated that the plague would continue in Sydney for the next four months at least. It is stated that the expenditure incurred by the Government in dealing with the plague amounts to approximately £30,000 a month. The work of prevention and extermination consists in quarantining areas in the city wherever cases occur, chiefly round Darling Harbour, and then employing the quarantined labourers in clearing out the filth that has been accumulating in them for years. The dwellings of "contacts" are thoroughly disinfected, mostly by the "formalin" process, and all persons in any way associated with plague cases are detained in quarantine for five days. The Government distributes free a special rat poison to all householders and sends round men to remove dead rats from premises free of charge. Many houses have been condemned and pulled down. A special hospital has been equipped at the quarantine station and placed under the charge of Dr. A. E. Salter, formerly health officer at Thursday Island. The Government has also appointed Dr. Harvey, formerly a medical officer of the Peninsular and Oriental service, as an expert on the bubonic plague, he having had experience of the disease in India and the East. A capitation reward is given for rats and an immense number have been destroyed. In connexion with the mode of transmission of the disease Dr. Tidswell, the bacteriologist of the New South Wales Health Department, has confirmed the observations of Simond as to the part played by fleas, and has demonstrated the existence of plague bacilli in the alimentary canal of fleas taken from plague-affected rats. In all the colonies extermination of rats is being carried

on most vigorously. In Victoria steps are also taken to prevent the introduction of rats from other ports in vessels. Every vessel must be kept four feet away from the wharf and all pipes, ports, and scuttles closed. All gangways and ropes, &c., by which rats might get ashore are to be kept in a sticky condition with tar and a constant supervision maintained by special watchmen. A special staff is employed in inspecting and seeing that regulations are carried out, consisting of Dr. Elkington, two inspectors, and three assistant inspectors. Inoculations with Haffkine's serum are being freely employed. In Victoria two cases of plague have occurred, both on a vessel arriving from Sydney. The vessel was quarantined for 12 days and the patients were placed in tents at the station, under the charge of Dr. Bull, of the Public Health Department. Plans have been prepared for hospital buildings to be erected at Coode Island for the reception of possible plague patients, consisting of two wards for ten patients each and the necessary administrative buildings, a bacteriological laboratory, &c., and accommodation for "contacts" and "suspects," all isolated. The estimated cost is £19,000, and the Government is not prepared at present to sanction so large an outlay for buildings that may never be required. Dr. D. A. Gresswell, however, the President of the Victorian Board of Health, is of opinion that the plague is sure to break out in Victoria and that the buildings are wanted. Several cases have occurred at Fremantle in West Australia, and there has been one case at Rockhampton in Queensland. The precautions taken in all the colonies are practically the same. The Premier of Victoria convened a conference of health officials to draw up regulations for the prevention of the spread of the plague. The following were appointed members of the conference:—Dr. Gresswell (chairman); Dr. Ramsay Smith, President of the Central Board of Health, South Australia; Dr. Black, Government medical officer, Western Australia; Mr. Mault, secretary of the Central Board of Health, Tasmania, advised by Dr. G. Sprott and Dr. Holmes; and Dr. W. W. R. Love, secretary of the Board of Health, and Mr. C. J. H. Wray, Government quarantine medical officer for Queensland. The sittings commenced in Melbourne and extended over three days there, and then, as New South Wales was concerned in any decision which might be arrived at, the conference adjourned to Sydney.

The Sydney and Prince Alfred Hospitals.

A deputation representing the committees of management of the Sydney and Prince Alfred Hospitals waited on the New South Wales Treasurer recently to ask for further financial assistance. Both institutions were in debt. The public subscriptions were stationary, but the expenditure had increased, chiefly owing to increased cost of provisions. Each bed cost the hospitals 28s per week, and the Government only allowed £1 per bed for Government patients. The Minister said he would lay the matter before his colleagues in such a way that he felt sure provision for the hospitals' requirements would be made in the estimates.

Victorian Branch of the British Medical Association.

A special meeting of the Victorian Branch of the British Medical Association has been held for the purpose of filling the vacancies on the council caused by the resignation of that body as previously reported. The attendance was very small. The following office-bearers were elected:—President: Dr. Neild. Vice President: Mr. F. M. Harricks. Honorary treasurer: Dr. Mullen. Honorary secretary: Dr. W. B. Vance. Local editor: Dr. L. Henry. Council: Mr. F. G. Hamilton, Mr. G. Cuscaden, Mr. J. Cox, Dr. W. Macansh, Dr. T. R. H. Willis, Dr. C. P. W. Dyring, and Dr. R. E. Weigall.

Memorial Portrait of the late Sir Anthony Brownless, M.D.

On April 25th His Excellency the Lieutenant-Governor performed the ceremony of unveiling a memorial portrait of the late Sir Anthony Brownless at the Wilson Hall, Melbourne University. Few men have devoted themselves so unselfishly to the University as did Sir A. Brownless, who was connected with it for 42 years, first as Vice-Chancellor and afterwards as Chancellor, and was practically the founder of its medical school, and, as the governor said: "If any school in the University had done greater and more important service than another it was the medical school." The portrait represents Sir Anthony Brownless in his Chancellor's robes and is an admirable likeness.

April 28th.

Obituary.

CORRADO TOMMASI-CRUDELI.

(FROM AN ITALIAN CORRESPONDENT.)

AN eminent patriot and man of science has just been lost to Italy. The Senator Tommasi-Crudeli died on May 30th at his residence in Rome in his sixty-seventh year. Born at Pieve Santo Stefano, in the province of Arezzo, he devoted himself to the study of medicine first at Pisa, then at Florence, and finally at Paris, where he attended the cliniques of the great Parisian consultants, Trousseau and Léon Colin, till the outbreak of hostilities with Austria in 1859. He saw a good deal of active service with the "Cacciatori delle Alpi," a corps in which he was surgeon-lieutenant, and on the conclusion of peace returned to Florence, where he was appointed assistant lecturer in pathological anatomy at the Istituto di Studi Superiori. Next year (1860) witnessed Garibaldi's descent on Sicily and young Tommasi-Crudeli joined the expedition that followed it at the head of 800 Tuscan volunteers whom he had helped to organise. At Palermo he was nominated "capitano medico"; at Milazzo he was wounded, and at Faro di Messina, where he was by this time promoted major, he was again wounded at the head of his battalion. On the annexation of the Two Sicilies he resumed his professional work at Florence, retaining the rank of honorary major in the 77th Infantry and holding the medal for military valour. Three years thereafter (1863) he was nominated Extraordinary Professor of Pathological Anatomy at Florence (the chair to which he had acted as assistant) and in 1865, as the result of a competitive examination, he was appointed professor of the same subject in the University of Palermo. In the following year, memorable in Sicily for the cholera visitation and the popular tumults that accompanied it, he commanded a select corps of the National Guard of Palermo and helped to restore order while working fearlessly and effectively in combating the epidemic. On this he compiled a report embodying acute and independent views on the etiology and the favouring conditions of cholera—a document which was reprinted 18 years afterwards on the return of the epidemic in 1884. By this time his fame as a pathologist was well established and at the instance of the great mathematician, then Minister of Public Instruction, Francesco Brioschi, he was in 1870 called to Rome to start the Istituto Fisiologico e Patologico in connexion with the new university. This he shortly after converted into the Istituto Anatomico e Fisiologico, with its seat on the Viminal Hill, and brought it up to the high standard of efficiency it has since maintained. His skill as a demonstrator in the laboratory and a lecturer in the theatre drew crowds to his classes and led to his nomination as extraordinary member of the "Consiglio Superiore della Pubblica Istruzione." In 1874 he was returned to Parliament for the constituency of Cortona; was re-elected during successive legislative periods; and in the fifteenth of these he carried a Bill for the diminution of the salt tax in a speech which is still remembered as one of the most powerful vindications yet attempted in Italy of State Hygiene as a factor in the nation's well-being. His duties in Parliament, however, never interfered with his work in the Anatomico-Physiological Institute. Well known and appreciated in Germany, where he had many friends, he followed up his researches on diphtheria, conjointly with Huster of Greifswald, by further and yet more elaborate studies on malaria, this time in conjunction with Klebs of Prague. These, which were published at the expense of the Royal Academy of the Lincei at Rome, carried the solution of the problem a considerable step beyond Léon Colin and the French Commission of 1869, and undoubtedly prepared the yet further advance made in that direction by Laveran in France, by Golgi in Italy, and more recently by Manson and Ross in Great Britain, to say nothing of Grassi, Bignami, Dionisi, and others of his compatriots. His work on the Climate of Rome, which was reviewed in THE LANCET of Oct. 9th, 1886, p. 674, though requiring supplement as to its views on the etiology and propagation of malaria, is still consulted for its admirable account of the distribution of subsoil water in the Campagna and for its demonstration of how malaria was practically non-existent in the second

century A.D. owing to the enlightened system of drainage and cultivation under the Antonines.

Other works still in repute among his compatriots are his "Istituzioni di Anatomia Patologica" and his "Preservazione dell' Uomo nei Paesi di Malaria colla Cura Arsenicale." In 1892 he was nominated Senator of the Kingdom of Italy, in which capacity he continued in the Upper Chamber the enlightened advocacy of State hygiene that won him so much respect and authority in the Lower. Of late years, though (comparatively speaking) by no means an old man, his work, scientific and legislative, sensibly slackened, the cause being a steady, if slow, failure of physical power due to the intense and often imprudent energy of his early manhood and middle age. For some months past he was seen by few except his intimate friends and medical colleagues till the end came on the evening of May 30th.

JAMES GROSVENOR MACKINLAY, F.R.C.S. EDIN.

MR. J. G. MACKINLAY, who died on May 24th at his residence, 15, Stratford-place, W., was born in 1844 at Isleworth. He was the eldest son of Dr. John Mackinlay, a surgeon in the Honourable East India Company's service from 1824 to 1834, and afterwards in practice at Isleworth for many years. He was educated at Epsom College and studied at Charing-cross Hospital, subsequently becoming house surgeon and for a few months holding the post of resident medical officer. On the somewhat sudden death of his father, in July, 1866, young Mackinlay was hastily called to give up his hospital appointment and take up the work thus vacated. His thoroughness in work and in the knowledge of his profession, combined with great kindliness of heart and absolute straightforwardness, enabled him to build up a capital practice and greatly endeared him to his patients. To the poorer classes he was a warm friend as well as a skilled adviser, and when a very serious attack of acute lung mischief compelled him hastily to throw up his practice in 1874 and (under the advice of the late Sir Andrew Clark and other medical friends) seek a doubtful restoration in the Antipodes his loss was greatly and truly mourned. Two years later, in much restored health, he re-commenced practice, but exchanged the wear-and-tear of general work for the study of the eye, which had had great attractions for him in his student days (he had been house surgeon to the Royal Westminster Ophthalmic Hospital in 1865). After filling the offices of registrar and clinical assistant to the last-named hospital he was appointed surgeon to the Western Ophthalmic Hospital, which post he held for five years. In 1879 he was elected ophthalmic surgeon to the Royal Eye Hospital and in 1881 to the Royal Free Hospital, both which appointments he held at the time of his decease. He was an Original Fellow and early a Member of Council of the Ophthalmological Society, to the Transactions of which he made numerous contributions, and for many years he was a member of the British Medical Association. His health had failed considerably during the past three or four years and for the last 12 months he had only on rare occasions been able to attend to any public or private work. By those who knew him intimately his memory will always be greatly cherished and his premature death sincerely mourned. He leaves a widow to deplore her loss.

AYLMER ELLIS HAYES, D.S.O., M.R.C.S. ENG., L.R.C.P. EDIN.

LIEUTENANT-COLONEL, ROYAL ARMY MEDICAL CORPS.

LIEUTENANT-COLONEL AYLMER HAYES was the son of the late Captain Hayes of the 83rd Regiment. He entered St. Mary's Hospital as a student in 1865 and took the diploma of M.R.C.S. Eng. in 1871. After a short experience of general practice he joined the Army Medical Staff, becoming surgeon in 1877, surgeon-major in 1889, and lieutenant-colonel in 1897. He saw much hard service in India and in Egypt, going through the whole of the Afghan war in 1878–80 for which he was granted the medal. In the Soudan war of 1888–89 he was principal medical officer on the staff of the then Sirdar, Sir Francis Grenfell. He was twice mentioned in despatches for his gallant conduct in this campaign and in August, 1890, was invested by Her Majesty at Osborne with the D.S.O. for distinguished service before the enemy. He also gained the Egyptian medal with two clasps, the Khedive's star, and the 3rd Class of the Medjidie. He was afterwards registrar and secretary to the Surgeon-General at Netley Hospital, and from 1893 to 1895 was in command of the 2nd Station Hospital at Aldershot. His next term of service was at Hong-Kong, and in September, 1897, he retired from the active list. He was a distinguished student of Oriental languages, passing the higher standard of Persian and gaining the prize in Arabic open to officers of the army. When the present war broke out he rejoined the army in command of the Connaught Hospital, Aldershot, where he had the care of some hundreds of invalids from South Africa.

About February in this year he began to fail in health and in March there was no concealing from him that he was suffering from malignant disease of the œsophagus and that his end was near. He elected to continue his work, which became the more arduous as the number of invalids from South Africa increased and as day by day his powers of taking nourishment diminished. On May 14th, after discharging his duties for the last time, he came to London in too serious a condition to return and he died six days later. He was buried at Aldershot on May 24th with full military honours. Among those present were Surgeon-General T. F. O'Dwyer, principal medical officer, Brigade-Surgeon Wilson, Lieutenant-Colonel Knox, A.M.S., commanding the Cambridge Hospital, Colonel Leyden, Major James, Major G. Hale, D.S.O., Mr. Ernest Lane, and Dr. Sidney Phillips, who with Mr. Edmund Owen had attended him in his last illness. Lieutenant-Colonel Hayes was a born soldier and was devoted to the army and to his profession. He was an able surgeon, as already mentioned, an accomplished musician and an Oriental scholar. He had a fine physique and a handsome presence, and there were few men more full of wit, gaiety, and vivacity. His courage on the field of battle met with public acknowledgment, but it was not greater than the fortitude with which he concealed from those around him the nature of his last illness and with gradually failing strength struggled to the last to discharge the duties of his post.

JAMES FENTON STAMPER, M.D. ST. AND., M.R.C.S. ENG., L.S.A., J.P.

DR. JAMES FENTON STAMPER died at his residence at Pembroke Dock on May 22nd. The deceased, who had been for many years in practice at Pembroke Dock, received his medical education at Guy's Hospital. He took the qualifications of M.R.C.S. Eng. and L.S.A. in 1861 and graduated as M.D. at the University of St. Andrews in 1862. Dr. Stamper was consulting physician to the Pembrokeshire and Haverfordwest Infirmary and surgeon to the Pembroke Dispensary. He held several other appointments, being also Admiralty surgeon and agent. He was a justice of the peace for the borough of Pembroke. The funeral, which took place on May 26th, was attended by the mayor and corporation of Pembroke, the magistrates, ministers of religion, the members of the medical profession, and representatives of several public bodies.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of this society was held on May 30th, at 5 P.M., Mr. Christopher Heath was elected President, and he took the chair. Mr. W. H. Bennett and Mr. Manley Sims were elected Vice-presidents, and Mr. Borlase Hicks, Mr. Simmonds, Mr. L. Read, Mr. Julian Willis, Mr. Milburn, Dr. Buzzard, and Dr. Morison, to fill the vacancies in the Court of Directors; the other officers were re-elected. From the report read by the secretary it was shown that the grants during the year had amounted to £3007 10*s*, while the expenses were £243 3*s*. 1*d*. The receipts available for payment had been £3353 7*s*. 7*d*., and the grants and expenses £3250 13*s*. 1*d*., leaving a balance of £102 14*s* 6*d*. No legacy had been received during the year. 14 new members had been elected, 10 had died, and one had resigned. Three widows had been placed on the funds and two orphans, four widows had died and one orphan had become ineligible for further grants, leaving 49 widows and 11 orphans in receipt of grants. The death of Sir James Paget, President, was reported and of Mr. Mould, Vice-president. A grant of £26 under By-law 78 was made to a widow. A vote of thanks to the editors of the medical journals for their kind advocacy of the interests of the society was passed. Mr. Christopher Heath returned thanks for his election as President and the meeting closed.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

WEDNESDAY, MAY 30TH.

THE Council met again to-day, Sir WILLIAM TURNER presiding.

Advertising by Medical Aid Associations.

Mr. BROWN moved:—

That the Registrar be instructed to send a copy of the resolution of the Council *re* medical aid associations of June 6th, 1899, to every registered medical practitioner residing in the United Kingdom.

This resolution, he said, had been come to in consequence of strong representations as to the injury being done to medical practice by the institution of medical aid associations which habitually employed canvassers to tout for patients. The terms of the resolution were "that the Council strongly disapproves of medical practitioners associating themselves with medical aid associations which systematically practise canvassing and advertising for the purpose of procuring patients." He was not aware that the passing of the resolution had had any great effect in checking the practices condemned by the Council, and, as members knew, when practitioners were brought before the Council to answer charges they very often pleaded ignorance of the regulations of the Council. He was very unwilling that any practitioner should be in ignorance as to the opinion of the Council with regard to this system of touting and canvassing.

Mr. HORSLEY seconded the motion.

Dr. HERON WATSON: Has Mr. Brown made any calculation as to what the cost of this will be?

The PRESIDENT: Have you looked into that matter, Mr. Brown?

Mr. BROWN: Perhaps the Registrar can give us some information.

The REGISTRAR (Mr. Allen) said that a circular in ordinary circumstances would cost £112, but as the Council would be sending out circulars next year to between 7000 and 8000 persons, the extra cost would be about £84.

The PRESIDENT explained to the Council that on more than one occasion this resolution had been sent out to individuals as a warning and information.

Dr. MCVAIL did not think the issue of this resolution would do much good. If the resolution had been stronger, if the Council had made up its mind to say that such conduct was infamous in a professional respect, then the case would have been different, but this was simply beating the air.

Mr. BRYANT said he did not think the Council would be prepared to go the length of saying that all such conduct was infamous conduct in a professional respect, though they might so regard particular cases.

Mr. BROWN insisted that this was a very pressing and important matter. He had just received a letter from the General Medical Practitioners' Union of Birmingham enclosing a copy of a pamphlet now in circulation, not touting for general practitioners, but touting for consulting practitioners. In this pamplet it was said that the ordinary medical man was only capable of dealing with the lesser ills of humanity.

The PRESIDENT said that the documents connected with this matter had reached the office of the Council and would be considered officially in due course; Mr. Brown might rest assured upon that point.

Mr. BROWN said he was glad to hear the statement of the President because he felt that the case was one which demanded consideration.

Sir JOHN BATTY TUKE suggested that Mr. Brown would gain his object by withdrawing his motion now and bringing up another one next session declaring these practices to be infamous conduct in a professional respect.

This suggestion was adopted by Mr. Brown and the motion consequently was withdrawn.

The Examinations of the Apothecaries' Hall of Dublin.

Sir DYCE DUCKWORTH presented reports from the Examination Committee on the examinations of the Apothecaries' Hall of Dublin held in October, 1899, January, 1900, and April, 1900. In the first report the committee said that the inspector reported that the examinations were in every way sufficient and he expressed his conviction that the body was doing its utmost to render them worthy of the confidence of the General Medical Council. In the second report the committee said the inspector reported that the examinations were in all respects sufficient. Speaking of the reports generally Sir Dyce Duckworth said they went to show that the examinations of the Hall were excellent. The inspector was satisfied with the conduct of them in all respects and made no adverse comments upon them. In the third report the Examination Committee said they desired to direct the attention of the Council to the fact that most of the candidates coming up for examination to this board had already passed the whole or parts of their previous examinations even in single subjects before other boards, sometimes in other divisions of the kingdom, and appeared either to choose or to seek by this piecemeal system admission to the Medical Register. This, of course, could not be regarded as satisfactory.

Mr. TICHBORNE took exception to this statement and asked Sir Dyce Duckworth as chairman of the committee to delete part of it.

Sir JOHN BATTY TUKE thought the whole statement should be deleted. The only point this Council had to consider was the statement that the examinations were in every respect sufficient.

Sir DYCE DUCKWORTH reminded members that this examination was the particular child of the Council and said the committee had been anxious to give the Council as much information as possible about it.

The Council by a majority decided to strike out the whole statement.

On the motion of Sir DYCE DUCKWORTH, seconded by Sir JOHN BATTY TUKE, it was agreed:—

That the Registrar be instructed to inquire of the various examining boards what evidence they require to be produced by candidates who claim to be exempted from examination in particular subjects on the ground that they had already passed in these subjects before other licensing bodies.

The Inspection of the Final Examinations.

Sir DYCE DUCKWORTH brought up the following recommendation from the Examination Committee, viz.:—

The Examination Committee desires to express its opinion to the General Medical Council that another cycle of inspections of the final examinations of the several universities and examining boards should be begun during the present year.

No inspection, he said, had been held for some seven years and it was thought by the committee that the time had come when they should begin another cycle of inspection. The committee had no proposal to make as to the division of the kingdom in which the inspection should begin. On the last occasion the arrangements were left in the hands of the Executive Committee. They would have to appoint an inspector and probably it would not be possible to get to work during the present year.

The PRESIDENT said it would take the Executive Committee some time to work out the details of the scheme.

Sir DYCE DUCKWORTH moved that the recommendation be received and entered on the minutes.

Dr. MCVAIL, seconding this motion, said it was about seven years since the last cycle of inspection ended. It began about 1887 or 1888 and it took five or six years for its completion. Under the Act they were supposed to be constantly inspecting the examinations and he quite thought the time had come when they should begin a new cycle of the final examinations.

Mr. HORSLEY: What is the probable cost

Sir DYCE DUCKWORTH: The average cost is about £360 a year.

Dr. GLOVER said he was disappointed with Sir Dyce Duckworth's way of putting this subject before the Council. The Council was not very flush of money just now and there was every reason why they should not spend money unnecessarily. If Sir Dyce Duckworth had shown any reason for believing that the effects of the last inspection had failed, or that there was anything seriously wrong in the way the examinations were conducted, or that a sufficient number of men were not being arrested by the examinations, he should not have offered any opposition; but in the absence of any such proof, or even an attempt to prove that the effect of the last supervision had passed away and that they were drifting into a loose or careless system of examination for admission to the Register, he could not think that any harm would be done by the postponement of this measure for

another year at least. He moved that there be a postponement for a year.

Dr. BRUCE seconded the proposal.

Dr. MACALISTER said that one reason for starting now was that it would be some time before the scheme could be got into working order. They could hardly get the first reports until 1901, which would be ten years after the last cycle was instituted. Another reason was that he regarded this not as a detective operation but rather as a stock-taking. It was right that the Council should from time to time discover what was going on. He had no doubt that this cycle of inspection, like the last, would disclose a great improvement in the examinations.

The motion for the receipt of the recommendation and its entry in the minutes was then put to the Council and agreed to.

Sir DYCE DUCKWORTH, seconded by Mr. BRYANT, moved:—

That, on the recommendation of the Examination Committee, arrangements be forthwith made by the Executive Committee under Chapter 23 of the Standing Orders for a systematic inspection and visitation of the final examinations of the several licensing bodies.

The proposal of Dr. Glover was put as an amendment and rejected by the Council by a large majority. Thereafter the motion of Sir DYCE DUCKWORTH was agreed to.

The Admission of Foreign Students to Examinations.

Sir JOHN BATTY TUKE presented the following report by the Education Committee on a motion seconded by Mr. HORSLEY, viz.:—

On Dec. 5th, 1899, it was moved by Mr. Horsley, seconded by Mr. Tomes, and agreed to:—

That the Education Committee be requested to consider the circumstances under which at present foreigners obtain exemption from some of the conditions of education and study required by certain of the qualifying medical corporations under the curriculum determined by the General Medical Council.

In the opinion of the committee this reference is covered by the "communication from the Education Committee in regard to the admission of foreigners to examination for registrable British qualifications," received by the Council on Dec. 4th, 1899. This communication stands as Appendix xvii. of vol. xxxvi. of the minutes.

This document sets forth clearly the conditions of education and study required of foreign students by the various qualifying bodies in Great Britain and Ireland and the committee deem it unnecessary to reproduce the statements therein made.

The Council has always held each licensing body as primarily responsible for the conditions under which it admits to examination candidates for its qualifications, and whenever reasons have existed for believing that the regulations were not in accord with the Council's resolutions the attention of the body has been directed to them. So far as the conditions of the various bodies regulating the admission of foreign students are concerned no specific case of inequality of conditions as between foreigners and British subjects has been brought under the notice of the Education Committee. Should any such representation on specific points be referred to the committee they are prepared to follow the usual course of sending the complaint to the body concerned, considering its reply, and reporting on the question to the Council.

The report was received, entered in the minutes, and adopted.

Diplomas in Public Health.

Mr. TEALE read the following interim report from the Public Health Committee dated May 28th:—

The committee cannot meet without expressing their sense of the great loss sustained by the Council, but above all by the Public Health Committee, in the death of their most able and indefatigable chairman, Sir Richard Thorne.

The committee have considered the replies of the bodies which confer diplomas in public health, with observations on the recommendations of the Public Health Committee contained in their report of Dec. 5th, 1899. Many of these replies contain carefully reasoned criticisms or suggestions demanding serious consideration, for which the Council is greatly indebted to those bodies. These criticisms and suggestions and the question whether the recommendations in the report of the Public Health Committee should need modification require more time than it has been possible to devote to their discussion during the present session.

The committee therefore recommend that the question should again be remitted to the committee for a final report at the November session of the Council. T. PRIDGIN TEALE, Chairman.

On the motion of Mr. TEALE, seconded by Dr. MCVAIL, this report was received and entered on the minutes, and the recommendation contained in it was approved of.

Registration of Students.

Sir DYCE DUCKWORTH presented a report from the Students' Registration Committee and moved that it be received and entered on the minutes and adopted. He remarked that the various cases mentioned in it had been very carefully considered. The decisions arrived at had been in most cases based on precedent and special consideration had been given to such cases as presented any special difficulty.

Dr. BENNETT seconded and the motion was agreed to.

Companies Act Amendment Bill.

Mr. TOMES gave in a report from the Committee on the Companies Act Amendment Bill. This informed the Council that Clause 3 of the measure now before Parliament dealt with the practice of medicine and dentistry by companies. The Bill had repeatedly stood on the order paper for second reading, but no further progress had been made with it, and it now seemed doubtful whether the Government intended to proceed with it during the present session.

The report was received and entered on the minutes, the motion acted upon being made by Mr. TOMES and seconded by Mr. HORSLEY.

An Application for Registration.

On the motion of Sir DYCE DUCKWORTH, seconded by Dr. MACALISTER, it was resolved to adopt a recommendation by the English Branch Council to enter on the Medical Register the name of Mr. William Raitt Scroggie, who holds the qualifications of Mem. R. Coll. Surg. Eng. 1882, Lic. R. Coll. Phys. Edin. 1882, Lic. Midwif. K. Q. Coll. Phys. Irel. 1882, a practitioner entitled to be registered under the Medical Act 1858, but who neglected to effect such registration until after the coming into operation of the Medical Act 1886.

Penal Clauses of Medical and Dentists Acts.

Dr. GLOVER asked leave to withdraw the following notice of motion which he had put upon the programme of business:—

That the Executive Committee, under the remit of resolution 13 in the minutes of May 24th, 1900, be requested to procure the written opinion of Mr. Muir Mackenzie as to the difference between Clause xxix. of the Medical Act (1858) and Clause xiii. of the Dentists Act (1878), with special reference to the obligation of the Council, under the respective Acts, to order the erasure of the name and qualifications of a practitioner, evidence of whose conviction for some offence has been supplied, or who has been found, after due inquiry, guilty of infamous conduct by the General Medical Council.

He (Dr. Glover) said that the necessity for this motion had ceased because it had been anticipated by the action of the Executive Committee.

Dr. PAYNE, who had agreed to second the motion, assented, and leave was given to withdraw the notice.

Advertising by Dentists.

Sir DYCE DUCKWORTH moved that a copy of the following resolution in respect of advertising adopted by the General Medical Council on May 20th, 1894, be issued from the Council's office to every dentist whose name is on the Dentists Register:—

That the attention of the Council having been called to the practice of advertising by certain dentists it is hereby resolved: "That the issue of advertisements of an objectionable character, and especially of such as contain either claims of superiority over other practitioners or depreciation of them, may easily be carried so far as to constitute infamous or disgraceful conduct in a professional respect."

In support of his proposal Sir Dyce Duckworth said that he had been moved to recommend this course to the Council because during the present session they had been told by persons who had been before the Council that they were really not aware of what the Council had done and therefore it seemed absolutely necessary to send their resolution of 1894 to every practitioner on the Dentists Register so that there might be no mistake in the future.

Mr. TOMES seconded the motion.

Dr. LOMBE ATTHILL said that the resolution seemed to sanction advertising generally and the Council disapproved of that. The four words "of an objectionable character" ought to be left out.

Dr. MACALISTER: That is the resolution.

Dr. LOMBE ATTHILL: Well, it will be brought up as a clear proof that advertising is sanctioned by this Council because it is only advertising of an objectionable character that we seem to disapprove of. I understood that we were to put down all advertising.

Dr. MACALISTER: I do not think that unobjectionable advertising could be called infamous conduct.

Mr. HORSLEY: That is not the point. Can we not amend the resolution as suggested by Dr. Lombe Atthill?

Mr. BROWN: That could scarcely be done without rescinding the resolution of 1894 and passing a new resolution.

The PRESIDENT reminded the Council that it was six years since the resolution was passed. He remembered very well the discussion which took place in connexion with it. The general opinion at the time was that the Council could not pass a resolution forbidding all forms of advertising and so the words "of an objectionable character" were inserted so as to show that there was a certain class of advertising

that the Council were not prepared to say was objectionable. Of course, if the Council's mind had changed during these six years, and they were now prepared to make their views more definite and more distinct, what he suggested was that they should not refer to the resolution of 1894 but pass another resolution. That really was the question that the Council had now to determine. If they passed Sir Dyce Duckworth's motion they practically adopted the old resolution of 1894, which they apparently did not think strict enough.

Dr. MACALISTER: We could not immediately proceed to act upon a new crime of this sort. We would have to give four or five years' notice.

Mr. TOMES: We have just acted for the first time on this resolution during the present session, and however desirable it might be to amend it the present is not an opportune moment for doing so.

Mr. HORSLEY: Would it not be better to withdraw this motion for the present and wait until times have changed a little more?

The PRESIDENT: It is for the Council to decide what is or is not objectionable.

Mr. TOMES: In medical cases it is the same—the Council have to decide.

Dr. MCVAIL: I think we should not proceed with this matter at all. It is tantamount to saying that advertising is objectionable. We should deal with cases as they come up, just as has been done this session.

The PRESIDENT: I think the ground for bringing forward the motion is that when we went into a case of objectionable advertising the other day it came out that this resolution of 1894 had never been communicated to persons on the Dentists Register, that it had been communicated only to some individuals, and not sent by post to every registered dentist. Sir Dyce Duckworth wants every dentist to have this put into his hands so that he might not have the opportunity of saying that he did not know of the resolution.

The motion was carried by 13 votes to 8.

Sir DYCE DUCKWORTH stated that the cost of giving effect to it would be about £17.

The Standard of Preliminary Examinations.

On the motion of Sir JOHN BATTY TUKE, seconded by Dr. MACALISTER, a further report of the Education Committee on the question of raising the standard of preliminary examinations in general education was received and entered on the minutes. This report was as follows:—

The Education Committee, in pursuance of the Council's resolution of Dec. 5th, 1899, have obtained from Mr. Sharpe, Dr. McGrath, and Professor McCormick a joint report "setting out in full their reasons for the conclusion they have arrived at with regard to the adoption of the senior and higher grade standard of preliminary education," together with a separate report from each of these experts on special points connected with the examinations of his division of the United Kingdom.

These four documents show that ample grounds are given for the conclusion that it is impracticable in the existing conditions to require of all intending medical and dental students the standard of general attainments represented by the so-called senior and higher grade examinations.

A substantial advance on the present requirements can, however, be made by insisting on improvements in the character and stringency of those "junior" examinations which can be directly influenced by the Council, and in the case of the others by requiring that candidates offering the corresponding certificates have obtained a higher standard than that of a simple pass.

Detailed suggestions are offered which, if adopted, would have the effect of bringing about the desired advance; and the committee, having considered these suggestions and discussed them with Professor McCormick, beg leave to commend them to the favourable consideration of the Council.

During the discussion a question, which has an important bearing on the problem in hand, was raised, and it appears to demand a definite answer on the part of the Council. The question is whether the time has not come for fixing a limit of age below which an applicant shall not be allowed to be registered as a medical or dental student. The committee are of opinion that such a limit should be fixed and propose that for the present an applicant for registration should be required to have attained the age of 16. At a future time, when a sufficient advance has been made in the standard of preliminary education, it may be advisable to raise the limit of age to 17. This would have the effect of inducing those who intend to enter on the study of medicine to spend a longer time over ordinary school subjects and so to fit themselves for the more stringent leaving and other preliminary examinations it is proposed to require. The committee accordingly recommend:—

1. That from and after Jan. 1st, 1902, no person shall be registered as a medical or dental student who has not attained the age of 18 years; and that for the purpose of ensuring the observance of this regulation every applicant for registration in the *Students Registers* shall be required to produce satisfactory evidence that this age has been attained.

2. That the Education Committee be authorised to take all needful steps to give effect to the recommendations and suggestions for the improvement of preliminary examinations contained in the appended joint-report of the expert advisers and to report from time to time to the Council thereupon.

The joint-report of Mr. Sharpe, Dr. McGrath, and Professor McCormick concludes with the following recommendations, submitted for the consideration of the General Medical Council:—

I.—THE CHARACTER OF THE EXAMINATION.

(*a*) In languages each examination should be of not less than two hours' duration, and if it includes questions on prescribed books (except in the case of prescribed masterpieces in English literature) of not less than three hours' duration.

In mathematics (which should include arithmetic, algebra, and geometry) the examination should be of not less than three hours' duration.

(*b*) In each examination the questions should be such as to test not merely knowledge but a power of intelligent application of knowledge.

In English the paper should include an essay and a paraphrase (see p. 14 (4)), also questions testing a knowledge of grammar, English history, and geography.

In classics and modern languages each paper should include at least one passage of some length from an unprescribed book for translation into English, an English passage of some length (except in Greek) and a few short idiomatic English sentences for translation, and questions on grammar.

In arithmetic and algebra most of the questions and problems should involve some thought and intelligent knowledge of the principles underlying the rules. In geometry most, if not all, questions should include a simple rider as an essential part.

(*c*) In languages questions on prescribed books should form not more than a third of the paper.

II.—THE DISTRIBUTION OF MARKS.

In English not less than a third of the marks should be allotted to the essay and paraphrase.

In classics and modern languages not more than a third of the marks should be allotted to questions on prescribed books, and at least a half of the marks should be allotted to "unseen" translation and prose composition.

In arithmetic and algebra the allotment of the marks among the questions should be, as far as possible, proportional to their difficulty. In geometry at least about half marks should be assigned to the simple rider attached to each book-question.

III.—THE STANDARD OF MARKING.

All examinations should satisfy the General Medical Council, by such supervision and organisation as may seem to them practicable, that the marking of examiners is conducted with due stringency and accuracy and is adjusted to the standard at which the examination aims.

IV.—THE MINIMUM PERCENTAGE OF PASS.

The *minimum* percentage demanded by the General Medical Council should be 40 per cent. in each subject (see IX.).

V.—THE MINIMUM STANDARD AT WHICH THE EXAMINATION SHOULD AIM.

In each subject the minimum standard and range of questions should approximate as nearly as possible to the standard and range of questions in the papers of the Lower Grade Leaving Certificate Examination of the Scotch Education Department.

It is suggested that the above proposals (I.–V.) should be regarded as instructions for all examining bodies and examinations at present recognised by the General Medical Council, except those of Government and University bodies, and that they should come into force, so far as these examining bodies and examinations are concerned, on Jan. 1st, 1902.

It is further suggested that the above proposals be sent to the abovementioned Government and University examining bodies, together with the present report, if approved by the General Medical Council, and such portions of the confidential reports as the Education Committee may deem necessary in each case; and that these bodies be requested to state how far in their opinion their respective examinations meet the requirements of the above proposals, and how far it would be desirable or possible for them to make modifications in their examinations to that end.

VI.—Subject to the proviso of Recommendation IX., in the undermentioned examinations the pass-mark in each subject for the purposes of medical preliminary examination should, on and after Jan. 1st, 1902, be fixed as follows:—

University of Oxford Junior Local Examinations (honours standard in one or more subjects).
University of Cambridge Junior Local Examinations (honours standard in one or more subjects).
Oxford and Cambridge Schools Examination Board Lower Certificate Examinations, 40 per cent.
Central Welsh Board Senior Certificate Examinations, 40 per cent.
Scotch Education Department Lower Grade Leaving Certificate Examinations, 40 per cent.
Intermediate Education Board of Ireland Middle Grade Examinations, 30 per cent.

VII.—In the following examinations each of the four subjects may be passed separately:—

University of Oxford Senior Local Examinations (with distinction).
University of Cambridge Senior Local Examinations (with distinction).
Oxford and Cambridge Schools Examination Board Higher Certificate Examinations (with distinction).
Scotch Education Department Higher Grade, or Honours, Leaving Certificate Examinations.
Intermediate Education Board of Ireland Senior Grade Examinations (with distinction).

VIII.—In all examinations recognised by the General Medical Council other than those mentioned under Section VII. the examination in all four subjects must be passed at one examination or at not more than two examinations, provided that the candidate may offer himself for re-examination as often as may be necessary to satisfy this condition.

IX.—In the case of examinations which satisfy the requirements in Sections I.-V., when the four subjects are taken at one time the four parts may be regarded as one examination and a pass may be granted if the candidate reach the necessary percentage in the aggregate marks of his papers as a whole, provided that the required pass-mark must be reached in the English paper.

Sir JOHN BATTY TUKE, as chairman of the Education Committee, thought that before moving the recommendations of the committee he should run over the history of the movement for the benefit especially of those members who had but recently joined the Council. He said that almost immediately after its inception the Council directed attention to the subject of the preliminary examinations in general education, and the records of the Council bore testimony to the great interest which had been taken in it throughout. The first important result obtained was an improvement in the character of the examinations by the withdrawal from licensing bodies of their examinations in general education, and by their placing them in the hands of strictly educational bodies. The next important step was the laying down of requirements in the various subjects of examination. The Education Committee watched most carefully how their recommendations were observed and the effect was a gradual raising of the general standard. Subsequently the Council insisted upon greater stringency by directing that most of the preliminary examinations should be taken at one time. This was an important step forward as it got rid of two classes of candidates—the undesirable and the doubtful. The effect was very seriously felt by both schoolmasters and examining bodies, but perhaps the very success of the Council's action induced certain members to propose the very bold step of cutting out all junior examinations whatsoever. At the first blush this seemed an effective method of dealing with the subject, but on careful investigation by the committee it was found that it could not be adopted because it was surrounded by difficulties that were insuperable, the chief difficulty being the defective condition of intermediate education throughout the kingdom. There was a great gap between "lower junior" and "higher senior," and the very highest authorities, men who had the best knowledge of the subject, advised the committee that the difficulties were not such as could be overcome, and if it were attempted to adopt the scheme the most serious consequences would result to the profession and to the public. The Council, however, were not convinced and a *referendum* was ordered. The committee consulted heads of schools and colleges, various medical bodies, and a number of private individuals, and the result was that there was an overwhelming consensus of opinion that the committee's view was the correct one, and the main reason assigned was that the state of intermediate education would not permit of the adoption of the scheme. Therefore, the committee had suggested the appointments of three educational experts, whom it was hoped and believed were thoroughly representative of the different parts of the United Kingdom and thoroughly well acquainted with the condition of education within them. These gentlemen began their work about a year ago and it was necessarily very arduous work, and notwithstanding the time and attention they gave to it they were unable to produce more than a provisional report for consideration in November last. The Council naturally wanted more information on the subject and these experts were re-appointed and asked to prepare a full detailed report. They had done so, and he thought no one could say that it failed in presenting the position in a thorough and full manner, for it was a very carefully prepared document, a valuable treatise on the whole subject. The leading fact these experts presented was again the imperfect state of intermediate education. It might be said to be very sad that it should be so, but he might ask if they were very much worse off than any other country? He thought that the answer to the question was furnished in the experts' report. They said:—

We found that a preliminary examination which would demand the Scottish higher grade leaving certificates in the four subjects required by the General Medical Council would be of a standard much higher than that of preliminary or matriculation examinations in any faculty of any university with which we are acquainted.

Further, he thought experience showed that they were not in any worse plight than any foreign country, for it was found that the ordinary practitioners of, say, France and Germany were not of higher culture than their own men. He for one failed to meet a want of culture in their own men. Perhaps they were not scholars, but scholarship was not their business, and he thought that those who had impressed upon the Council the raising of the standard of general education higher had overlooked the fact that medical education was a liberal education in itself. It must be borne in mind that the medical student was brought into contact with subjects that required a large amount of collateral education and that his general education did not cease when he commenced the medical curriculum. His scientific course was as productive of culture as the literary training of the arts school. The experts concurred in the view of the Education Committee. They had adopted in their report the general principles that the Council should insist upon a gradual improvement of general education examinations. In point of fact, they recommended a standard of examination which might be roughly taken to represent the meeting-place of the higher juniors and the lower seniors, a grade which also represented the standard applied by the great examining bodies and conformed to the test of 16 to 17 years as being the suitable age for youths to enter upon scientific work. Certain people had held that uniformity could be best obtained by the Council instituting examinations of its own. But it would be *ultra vires* to do that and it would not, if it could be done competently, be advisable to proceed with such examinations because of the serious complications such a system would cause in relation to school examinations. But as a matter of fact the committee and the experts were content to work with the machinery which at present existed, and the experts had suggested a scheme by which the standard of present examinations might be raised and equalised, whether by higher pass marks or otherwise, and that these examinations should be allowed to be passed at not more than two times. The committee proposed that the suggestions of the experts should be sent to all university bodies with a request to know how far the general recommendations meet with their approval in theory and practice. They proposed also to send the opinions of the experts to a number of outside bodies who were not Government bodies or universities, in order that they might adapt themselves to the lines of the standard selected. The committee would have every opportunity of judging how far these bodies might conform, for they could see the set papers and examine the students' answers. With regard to the experts' conclusions, these had been arrived at to a very great extent from information contained in confidential communications. They said in their joint report:—

Much of the information upon which we base our classification is of a confidential character and has been obtained from the various authorities on this strict understanding. The points we have had to take into consideration are many and various, and merely to give a classification without our reasons for such classification would be of little or no service and might in many cases be misleading. In the case of a few examinations we have been unable, owing to insufficient information, to give more than a tentative estimate. Apart from these considerations public criticism of particular examinations might alienate some of those examining bodies upon whose cordial coöperation the General Medical Council must depend in bringing about a genuine reform. And, lastly, the scheme of reform which we have to suggest does not, at least for the present, necessitate such public criticism.

Accordingly he (Sir John Tuke) hoped that no demand would be made for the production of these confidential documents. He believed that if the Council agreed to the two recommendations which the committee proposed they would find that they had got a good and solid ground on which to build up future reforms. The committee asked the Council to have confidence in them and commission them to carry out the scheme as detailed in the experts' report. If the Council gave this commission the committee would keep in mind the strong desire on the part of the Council as well as of themselves to raise the whole character of these preliminary examinations, keeping in view the necessities of the public and the interests of the profession. He begged to move that the committee's first recommendation be adopted.

Dr. MACALISTER seconded the motion, because the experts told the Council that unless they decided that the age should be 16 years or below 16 their advice would be ambiguous. If it were 16 they gave clear directions as to what to do. The Council should therefore first settle the age and do that now.

Sir DYCE DUCKWORTH said that the feeling that prevailed in the Council was that they must take things as they found them and accept small mercies when they were offered, but he hoped that the Council would give expression to the view that the age might very soon be raised to 17 years.

Dr. LOMBE ATTHILL pointed out that if the age was raised higher than 16 that would not be convenient, for the Act provided for the registration of medical practitioners at the age of 21.

The motion was agreed to.

Accordingly, from and after Jan. 1st, 1902, no person shall

be registered as a medical or dental student who has not attained the age of 16 years; and for the purpose of ensuring the observance of this regulation every applicant for registration in the Students Registers shall be required to produce satisfactory evidence that this age has been attained.

Sir JOHN BATTY TUKE, seconded by Dr. MACALISTER, moved the adoption of the second recommendation.

Mr. HORSLEY wished to know if the existing list of examinations was to be absolutely abrogated if the committee were authorised to carry the new scheme into effect. He could not see how the scheme was to be carried out without considerable expense, for after two years' time he took it that the Council would have to employ the experts as inspectors. He took it that the Council had full confidence in the committee to carry out the scheme. The recommendations of the experts fell short, he thought, of what they might expect. They were governed by serious limitations in the narrative which went to show that the experts themselves felt that there were great difficulties in making the recommendations and that there would be difficulties in carrying them out. He was sent to the Council to speak in favour of a much higher examination and he should always do so. But if the Education Committee said, "Have confidence in us and let us try this scheme for two years or so," he could not very well see how the Council could refuse.

Dr. PAYNE pointed out that, broadly speaking, the higher class school life of this country did not end till the pupils were 18 years and he wished their intending medical students could remain at school until that age. In Germany and France the age for intending medical students leaving school was from 18 to 19, and in his view the standard of general education for the medical profession was consequently higher than in this country. If, however, they made the "senior" examination the necessary standard they would not be fixing an educational standard but a social and financial standard. They would be laying down the opinion that intending medical students should be able to afford school till the age of 18 years. He really doubted if that would be possible generally. There was an average of quite two years' difference between the "junior" and the "senior" examinations. With a five years' medical curriculum it would be difficult to go beyond 16 years as the minimum age limit, and that was another difficulty in the way of making pupils looking forward to enter upon medical studies stay at school until 18 years of age. If the scheme now put forward were adopted he was sure that Oxford and Cambridge would do what they could to meet the views of the Council. But the Council would hardly expect them to alter their whole scheme of examination to do that. At one time he was of the opinion that all the Council needed to do to secure the raising of the standard was to pass a resolution abolishing all the junior examinations, but he had come to the conclusion that the amount of reform now offered was the utmost which at the present moment could be satisfactorily carried out.

Dr. MACALISTER believed that he was expressing the feeling of the Education Committee when he said they were gratified that their labours, which had not been light, had been so well received by the Council. With regard to the expense in giving effect to the scheme the Council at the last meeting had made a grant of £100 in connexion with the work of the experts, and the committee hoped that a great deal more could be done without more money. What remained of the £100 was practically sufficient for at any rate the preliminary work. There was nothing secret or mysterious about the confidential documents or anything to be ashamed of. Those who furnished them desired that the details of their examinations should not be made public in any way simply because they would get to the ears of students and teachers who would prepare up to a certain standard and no higher. The committee and experts would be breaking faith if they made the documents public.

Dr. MCVAIL called attention to the fact that in one part of their joint report the experts expressed this conclusion: "Such examinations are comparatively worthless as tests or a good preliminary education." He asked if there were many and recognised examinations to which that could be applied.

Dr. MACALISTER explained that there were only one or two, and even in connexion with these the conclusion was explainable. It referred to languages only; that books should not be prescribed. It was solely with reference to the question of set books or not set books. It did not speak of examinations as a whole. As to the experts' series of recommendations it would be of no use considering these one by one. They must be taken as a whole or left altogether alone. It would not do to take some and leave others.

Sir CHRISTOPHER NIXON had no doubt that quite a number of bodies would not accept the experts' recommendations, but if the Council could secure the fixing of a minimum standard of examination below which they would not allow a youth to be registered as a medical student, and do that without any revolutionary measures, it would be a decided gain, and for that reason he strongly urged the Council to pass these recommendations.

Dr. MCVAIL had hoped they would have got more than the committee and the experts offered, and he thought that the Council, while agreeing to what was presented, might indicate that the time would come very shortly when they would demand a much higher standard. The committee should at once set to work to furnish a list of the bodies with whose examinations the Council could be entirely satisfied. The present list was not quite reliable because it took men from anywhere and everywhere.

The motion proposed by Sir JOHN BATTY TUKE was agreed to. Accordingly, the Education Committee were authorised by the Council to take all needful steps to give effect to the recommendations and suggestions for the improvement of preliminary examinations contained in the joint report of the expert advisers and to report from time to time to the Council thereupon.

Sir JOHN BATTY TUKE moved a vote of thanks to Mr. Sharpe, Dr. McGrath, and Professor McCormick for the valuable assistance which they had given to the Council in relation to the question of preliminary examinations.

Dr. MACALISTER seconded the motion.

The PRESIDENT said that having had the opportunity of knowing perfectly the great labours that these gentlemen had given to the consideration of the matter in question, and also knowing what fee was placed at the disposal of the Education Committee, he should like to say that these gentlemen had done a great deal more work than they had been paid for in money, therefore he thought the Council should record their thanks for the work they had done.

Dr. LITTLE asked if it was becoming on the General Medical Council to employ three experts and not pay them properly. He would rather propose that they should receive an addition to their honorarium. He did not know them at all.

The PRESIDENT said that these gentlemen undertook the duty, not in view of a money payment, but rather from a desire to help the Council in this branch of their work.

The motion was agreed to.

The Pharmacopœia.

Dr. MACALISTER, deputy chairman, in the absence of Dr. Leech owing to illness, presented the following report by the Pharmacopœia Committee:—

The Pharmacopœia Committee desire to record their regret at the enforced absence through illness of their chairman, Dr. Leech, and their grateful acknowledgments of the manner in which he has carried on the work of the committee since their last meeting.

The committee have now to report that 31,500 copies of the British Pharmacopœia of 1898 have been printed, and 28,783 of these have passed into circulation, leaving in hand 2717 copies.

A communication from the Privy Council, forwarding a copy of a note addressed to the Secretary of State for Foreign Affairs by the Belgian Minister, on the subject of a proposed International Pharmacopœia limited to drugs of a drastic nature, has been referred to this committee by the Executive Committee. The committee recommend the Council to reply that, should an international conference on the subject in question be arranged, the Council would be prepared to appoint representatives to participate in it and to authorise the President to appoint one or more members to act as delegates.

Another meeting of the conference of members of the Pharmacopœia Committee with representatives of the Pharmaceutical Society of Great Britain and the Pharmaceutical Society of Ireland has been held, and on its recommendation certain questions of a pharmacological and pharmaceutical nature have been referred to experts for further investigation and report.

Communications have been opened with the United States authorities with a view to bringing about greater uniformity in the official preparations contained in the British Pharmacopœia and the United States Pharmacopœia respectively, and it is hoped that, by mutual concessions, important approximations and assimilations in the contents of the two works may be ultimately secured.

Further communications have been received with reference to the Indian and Colonial addendum and important suggestions from Canada have been considered by the committee in detail. A report on progress has been prepared by the editor and is hereto annexed. It is hoped that a final draft of the addendum may be presented to the Council at the November meeting and that the addendum itself may be authorised for issue by the end of the year.

By the assiduous efforts of Dr. Leech a valuable collection of British

and foreign works bearing on the history and development of the pharmacopœia has been got together and deposited in the Council's office. Thanks are due to Dr. Leech, Mr. Bryant, Mr. Ekin, and Mr. Walter Hills for important contributions to this collection, and the committee hope that from time to time further additions may be made to it by members of the Council and others. A hand list of the works already deposited has been printed and will be sent to members of the Council, and a card catalogue prepared under Dr. Leech's direction is placed with the collection in the committee room.

On the motion of Dr. MACALISTER, seconded by Dr. LOMBE ATTHILL, this report was received, entered on the minutes, and adopted, and the Council recorded cordial thanks to Dr. Leech, Mr. Bryant, Mr. Ekin, and Mr. Walter Hills for the important contributions they had secured for the Pharmacopœia Library.

The Council adjourned.

THURSDAY, MAY 31ST.

The Council met again to-day, Sir WILLIAM TURNER being in the chair.

The Council and the English Royal Colleges.

On the motion of Dr. MACALISTER the following report was received and entered on the minutes, viz.:—

REPORT BY THE EDUCATION COMMITTEE ON CERTAIN COMMUNICATIONS FROM THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Education Committee have given careful and prolonged consideration to the communications forwarded by the Royal College of Physicians of London and the Royal College of Surgeons of England with reference to the new regulation for the registration of medical students, which communications have been laid before the Committee by direction of the President.

This regulation was adopted by the Council on June 7th, 1899, on the recommendation of the Education Committee, who reported as follows (Minutes, vol. xxxvi., p. 562):—

"The licensing bodies should be informed that schools for boys and girls were not intended by the Council to be regarded as institutions at which the first of the five years of medical study may be spent, and the Council should require that before registration is effected a student should have commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies and approved by the Council. If this were done the recognised institutions would not merely as now be reported to the Registrar but would come in a regular and formal way before the Council for its approval. Attention could thus be drawn to any institution regarding which objection might be taken and approval withheld if the evidence as to its status and efficiency were unsatisfactory. As registration is a matter over which the Council alone has control this manner of dealing with the difficulty appears to be the least open to objection."

The regulation, which came into force on Jan. 1st, 1900, read as follows:—

"No medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council and has commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies and approved by the Council."

The Royal College of Physicians of London and the Royal College of Surgeons of England, alone of all the licensing bodies, have taken objection to this regulation, and on Oct. 26th and Nov. 2nd, 1899, they adopted a resolution affirming that they "fail to recognise any authority under the Medical Acts in virtue of which the General Medical Council may impose the conditions formulated in the regulation in regard to the registration of medical students," and that "they decline to recognise the requirement that scientific institutions where medical study is commenced should be approved by the General Medical Council."

This intimation was conveyed to the Council on Dec. 4th, 1899, when the President was requested to inform the Royal Colleges that the Council adhered to its regulation and to invite the Colleges to take the matter into fresh consideration in view of its important bearing on the maintenance of the standard of study and examinations in the country at large.

The President informs the committee that he has had an opportunity of conferring with representatives of the Royal Colleges on the subject and that the Committee of Management of their Examining Board submitted a report upon it to the two Colleges. The Committee of Management stated that "after a full consideration of the question in all its details they are unable to discover any grounds for altering the decision of the Royal Colleges" as stated in the resolution above referred to. They also appended a memorandum, copies of which have been courteously furnished to the Education Committee, setting forth the legal and other grounds for the view they had taken. The report of the Committee of Management has now been adopted by the Royal Colleges and constitutes their answer to the Council.

Three questions appear to arise for the consideration of the Council:—

1. Whether it is in the interest of medical education generally that the first year of medical study should be taken at ordinary schools of higher elementary or of secondary education, even when these give good elementary instruction in science in addition to the other subjects of school study?

2. Whether it is contrary to law or beyond the powers of the Council to impose the conditions formulated in the regulations under which a student may be registered as having passed a suitable preliminary examination and as having entered on a course of medical study?

3. Whether any one of the licensing bodies can legally require the General Medical Council to enter on the register of medical students the name of a student who has not fulfilled the conditions prescribed by the Council itself?

I.—On the first question the committee maintain the opinion they have repeatedly expressed that ordinary school education should be completed before the five years' medical curriculum is entered upon, and they believe that the regulation in question is the simplest practical method of insuring this. They therefore recommend that the Council should continue to adhere to it.

II.—On the second and third questions the committee recommend that the opinion of the Council's legal adviser be obtained before the next session of the Council.

III.—With regard to the individual applications for registration which have been received by the Registrar since Jan. 1st, and which cannot be dealt with by him without further instruction, the committee recommend that they be referred to the Students' Registration Committee as exceptional cases to be dealt with on their individual merits.

Dr. MACALISTER, in moving the adoption of the first recommendation of the committee, said that 12 copies of a memorandum prepared by the Royal Colleges had been received. They were marked "Confidential" and they would be circulated among the members of the Council so far as they would go. He understood that the memorandum had been prepared for the information of the Colleges. Reference was made to a legal opinion obtained by the Colleges, but the legal opinion was not given, and therefore as a member of this Council he could not state what line it took.

Mr. HORSLEY asked whether it would not be well to defer this motion until next session in order that members might have an opportunity of studying the memorandum.

The PRESIDENT said there was no reason why Mr. Horsley should not have a copy of the memorandum given to him now.

Mr. HORSLEY declined to vote upon the question before he had had an adequate opportunity of studying the memorandum.

Dr. MACALISTER, after explaining that it was only yesterday he obtained permission to circulate the memorandum, said that practically the memorandum decided the question which had to be discussed by the Council. The Royal Colleges had taken up the position apparently that the Council had no legal right to lay down such conditions as they had laid down for the registration of medical students. By doing so they confused the issue. The registration of students was a matter for this Council. With regard to the actual course of study which a student must have gone through for the diploma of the licensing bodies, that was a matter under their supervision, but they had no legal power to define beforehand or to control in the sense in which the word was used by the Royal Colleges. If they (the Council) were dissatisfied with the actual course of study which the licensing bodies had prescribed and required they could represent the matter to the Privy Council, and that was the limit of their control over the actual course of study pursued by any of the licensing bodies. He asked the Council to distinguish clearly between the two things—the registration of students and the course of study. The whole argument of the Royal Colleges was addressed to the second of these, and the Council had to address itself to the first. The Council asked of students that they should have passed a preliminary examination which they thought was sufficient and that they should have *bonâ-fide* commenced the five years' course of medical study. The Royal Colleges practically failed to recognise the right or authority of the Council to require either of these things. The Students Register had been established by the Council for their information, that they might have a means of testing first of all how long the curriculum of students was and secondly of ensuring that they had had a sufficient preliminary training before they began their medical studies. The question was what was five years of medical study from the point of view of this Council. They had pointed out that if students were allowed to pass six months of their period of medical study in higher elementary schools they were to this extent diminishing the medical curriculum; the Council had long protested against what might be called half-timers in respect of medical study. The Students Register was the creation of this Council, and he for one held that they had a right to state what were the conditions for entering a man's name upon it. If the Council still took the view that medical half-timers were not to be admitted to the Students Register then they must adhere to the conditions they had laid down—it was the only way to stop the growth of the practice. The Council did not dictate what conditions the Colleges should accept, but they said what conditions they (the Council) should accept. All the bodies except the two Royal Colleges in England had accepted the

regulations of the Council as they stood. Many of them declined to recognise this elementary or public school medical education at all. They protested very strongly against it being recognised by this Council and he thought they had a right so to protest. Yet if the Council accepted the suggestion of the Royal Colleges and put everyone on the Register whom they desired to be put on the other bodies would be so far coerced and controlled. The Royal Colleges therefore asked not only to control the Council but also to control all the other licensing authorities. That was a position which he thought the Council ought strenuously to resist. The Students Register was not a statutory obligation upon the Council. It was a creation of the Council—a piece of mechanism for carrying out the purposes of the Act. It was not statutory but it was not *ultra vires* and it was not illegal.

Dr. PAYNE, seconding the first recommendation, defended the regulations of the Council and spoke of the system of the Royal Colleges as bad in its immediate results and bad in its tendencies.

Sir HUGH BEEVOR expressed the opinion that an incentive to a boy to occupy his last school year with medical study would be a bad thing for education.

Sir PHILIP SMYLY said that this subject was first brought to the notice of the Council by the Irish College of Surgeons who complained that the period of professional study was being cut down from five to four years. The question here was a question of competition downwards. It was also a pecuniary question, because parents were anxious to know where they could get the cheapest education for their sons. Mr. Bryant had told them that they had required the preliminary subjects to be taken before the five years began and they had stopped it because the Royal Colleges found it would not pay.

Dr. PETTIGREW said he regretted exceedingly that the Royal Colleges had put themselves in this position, which he considered an entirely false one. The effect of the action of the Council had been to screw up the schools to give better education, and it would, in his opinion, be unfair to those schools if this Council recognised secondary education.

Sir CHRISTOPHER NIXON expressed his concurrence in the recommendation of the committee. The Royal Colleges maintained, he said, that the Council were alone an administrative body, that they had no constructive or legislative powers, and that they had no right to make rules or regulations or any form of requirement. In other words, they held that the Council had all along been acting upon a false assumption of authority. In such circumstances he saw nothing for it but to follow the recommendations of the committee and take the opinion of their legal advisers. As for the representatives of the two Colleges he did not think their action was perfectly consistent. While they denied the right of the Council to interfere in this matter they claimed for the Council the right to inspect, not only the final examinations of the Apothecaries' Hall of Dublin, but also the earlier examinations of that body.

Mr. BRYANT said he did not propose now to discuss the report of the committee. No doubt it was a most interesting document and drawn up with a view to support a certain resolution of the Council. He felt that the Council could not be in the right position to come to a proper decision on the matter until they had had an opportunity of studying the memorandum of the Royal Colleges. In this memorandum the case of the Royal Colleges was stated. He was sorry the document had not been printed as an appendix to the report. The committee were supplied with copies and more copies could easily have been furnished for the other members of the Council. In the peculiar circumstances of the situation he moved the adjournment of the debate until the November session.

Dr. MCVAIL objected to this. This question affected all the bodies throughout the country and adjournment only meant that the two Royal Colleges in England were to go on for another six months in the way they had been doing. If the Council were going to play with this question he saw no reason why the other bodies should not follow the example of the English Colleges.

Mr. BROWN thought the Council should have both sides clearly before them before they decided this important question.

Mr. HORSLEY said that adjournment of the debate would not impair the position which the Council almost unanimously took up last session.

Sir WILLIAM GAIRDNER said he had no objection to these preliminary subjects being taught in schools so long as there was no interference with the medical curriculum.

The motion for the adjournment of the debate was then put and agreed to.

Mr. BRYANT explained that he had got up several times during the debate to move the adjournment, but had not had an opportunity of speaking.

Mr. HORSLEY asked whether the Royal College of Physicians of London would furnish the Council with the opinion of their standing counsel.

Sir DYCE DUCKWORTH said he would consult the College upon that point. For himself he thought the memorandum gave all the information that was necessary.

The PRESIDENT said that if the Council would give him leave he would ask Mr. Muir Mackenzie to state his opinion on the whole question. He thought that it would be a good thing for Mr. Muir Mackenzie to see the legal opinion which had been given to the Royal Colleges and such of the other documents as might be necessary.

Dr. MCVAIL: Very good.

Dr. MACALISTER moved that the memorandum of the two Colleges be entered in the minutes as an appendix to the report of the Education Committee.

Mr. BRYANT said he had no objection to this being done.

The motion was agreed to by the Council.

On the suggestion of Dr. MACALISTER the third recommendation of the committee was agreed to. In this connexion Dr. MACALISTER gave the assurance that no disputed questions would be raised.

The University of Birmingham.

On the recommendation of the Education Committee the proposed Matriculation Examination of the University of Birmingham was added to the list of recognised Preliminary Examinations.

Medical Act for Jersey.

The Education Committee presented a report with comments on an Act passed this year by the states of Jersey dealing with the practice of medicine and surgery in that island. The President was requested to forward the comments to the Lord President of the Privy Council.

Restorations to the Dentists Register.

The Executive Committee reported that the prescribed conditions in each case having been duly fulfilled the names of the under-mentioned persons had been restored to the Dentists Register, from which they had been erased in conformity with the provisions of Section 12 of the Dentists Act:—Herbert George Blackmore, Hamersley Campbell, Victor Massey-Crosse, William James O'Hara, and William Henry Smith.

The Society of Apothecaries Title.

Mr. BRYANT presented a report from the special committee appointed to consider letters from Mr. James R. Upton, clerk to the Society of Apothecaries of London, on the subject of the use of the titles physician and surgeon. The committee reported that—

They are not prepared to recommend that the funds of the General Council should be employed to guarantee, in conjunction with the Society of Apothecaries, the expenses of the plaintiff and defendant respectively in a test case to determine, by the Court of Appeal or the House of Lords, whether a Licentiate of the Society of Apothecaries is entitled to describe himself as physician or surgeon.

Seconded by Mr. HORSLEY, Mr. BRYANT moved that the report be received and entered on the minutes and that the recommendation contained in it be adopted.

Sir HUGH BEEVOR remarked that the Society of Apothecaries would have been pleased if this question could have been taken on the higher plane of the General Medical Council assisting in obtaining a decision, but in this instance they would be content to take their own course.

The motion was passed.

The Pharmacopœia.

The Council ordered strangers to withdraw so that they might receive *in camerâ* an opinion by the Council's legal adviser on the question of the copyright of the British Pharmacopœia.

Appointment of Solicitor.

The Council also sat *in camerâ* to receive a report from the Executive Committee in regard to the appointment of a standing solicitor to the Council in the room of Mr. F. W. Farrer, resigned. They appointed Mr. W. H. Winterbotham, official solicitor to the Supreme Court.

Acknowledgment of Mr. Farrer's Services.

On the motion of Sir DYCE DUCKWORTH, seconded by Mr. BRYANT, the following resolution was agreed to:—

The Council desires to record its warm appreciation of the services rendered to it for so many years by Mr. F. W. Farrer in his capacity as standing solicitor and to express its regret that the state of his health no longer permits him to assist the Council.

Appointment of Registrar.

Dr. MACALISTER, reminding the Council that under the Standing Order the appointment of general registrar was an annual one, moved the appointment of Mr. H. W. Allen till the closing day of the May session of 1901.

The motion was unanimously passed.

Appointment of Committees.

The Council's committees were re-arranged as follows:—

Executive Committee.—Sir Dyce Duckworth, Mr. Bryant, Dr. MacAlister, Dr. Glover, Dr. Heron Watson, Sir William Gairdner, Dr. Lombe Atthill, and Sir Philip Smyly, with Sir William Turner, the President of the Council, as an *ex-officio* member.

Penal Cases Committee.—Mr. Bryant, Mr. Tomes, Dr. Glover, Mr. Horsley, Dr. Heron Watson, Dr. Bruce, Sir C. Nixon, and Sir William Thomson.

Examination Committee.—Members nominated by the English Branch Council: Sir Dyce Duckworth, Mr. Bryant, and Mr. Teale; nominated by the Scottish Branch Council: Dr. Heron Watson, Dr. Pettigrew, and Dr. McVail; nominated by the Irish Branch Council: Sir Philip Smyly, Sir William Thomson, and Dr. Little.

Education Committee.—Members nominated by the English Branch Council: Dr. MacAlister, Dr. Glover, and Dr. Payne; nominated by the Scottish Branch Council: Sir John Batty Tuke, Sir William Gairdner, and Dr. Reid; nominated by the Irish Branch Council: Sir Christopher Nixon, Sir William Thomson, and Dr. Bennett.

Public Health Committee.—Members nominated by the English Branch Council: Mr. Power, Mr. Teale, and Dr. Pye-Smith; nominated by the Scottish Branch Council: Dr. Bruce, Dr. McVail, and Dr. Hector Cameron; nominated by the Irish Branch Council: Sir Philip Smyly, Dr. Bennett, and Mr. Tichborne.

Pharmacopœia Committee.—Dr. Leech, Sir Dyce Duckworth, Dr. Lombe Atthill, Dr. MacAlister, Sir John Batty Tuke, Mr. Tichborne, Dr. Payne, and Dr. McVail.

Dental Committee.—Sir William Turner, Sir Dyce Duckworth, Dr. Heron Watson, Mr. Tomes, and Sir Philip Smyly.

Dental Education and Examination Committee.—Mr. Bryant, Dr. Reid, Mr. Brown, Sir Philip Smyly, Dr. Hector Cameron, and Mr. Tomes.

Students Registration Committee.—Sir Dyce Duckworth, Dr. Cameron, Dr. MacAlister, Sir Batty Tuke, and Sir William Thomson.

Finance Committee.—Sir Dyce Duckworth, Mr. Bryant, Dr. Heron Watson, and Dr. Bennett.

Dr. Pye-Smith and Sir Hugh Beevor acted as scrutineers of the ballot taken in the case of the Executive and the Penal Cases Committees respectively.

The Finances of the Council.

Mr. BRYANT submitted the report of the Finance Committee on income and expenditure for the year 1899 and comparison with former years. This report was as follows:—

The Finance Committee report that the income of the General and Branch Councils for the year ending Dec. 31st, 1899, was £10,405 11*s.* 6*d.*, and the expenditure for the same period having been £10,677 10*s.* there is a deficit of £261 18*s.* 6*d.* This is due to the fact that for the first time the solicitor's account for law expenses has been included as a liability for the year in which it was incurred, and therefore two years' law expenses are included in one year, which will not occur again. Had it not been for this there would have been a surplus of £350 4*s.* From Table A it will be seen that the fees received by the Branch Councils show a considerable increase, for £449 17*s.* 6*d.* more was received from that source by England, £133 9*s.* 6*d.* more by Scotland, and £120 5*s.* more by Ireland, making a total increase of £703 12*s.* In 1897 there was a decrease from the previous year of £779 12*s.* 6*d.*, and in 1898 a decrease of £114 5*s.* The net proceeds of the sale of the Pharmacopœia for the year were £1365 10*s.* 1*d.*, but there will probably be found to be a very considerable drop in this item at the close of the current year.

The items of increased expenditure will be found on Table B, and amongst these may be specified the following:—

(*a*) An increase of £173 6*s.* 6*d.* for various committees' fees and expenses, chiefly caused by the fees, £91 10*s.*, paid to the experts who assisted the Education Committee. Omitting this item, which, however will appear again this year, the increase would have been only £18*s.* 16*s.* 6*d.*

(*b*) An increase of £105 13*s.* 7*d.* in miscellaneous printing, which is more than balanced by the decrease in General Council and Executive Committee Printing.

(*c*) An increase of £752 16*s.* for law expenses, which is explained above. Had the liability for 1899 been, as usual, omitted, the increase would have been £140 13*s.* 6*d.*

(*d*) An increase of £43 10*s.* for interest on the mortgage, due to the amount spent on the recent alterations.

(*e*) An increase of £215 12*s.* 6*d.* for the sinking fund, an item which will occur for 49 more years.

On the other hand a decrease may be noted:—

(*a*) In the fees to Members of the Council and Executive Committee, amounting together to £658 7*s.*

(*b*) In the Pharmacopœia.

(*c*) In the printing of Registers, the great expense of setting up caused by the new contract being now met.

(*d*) In miscellaneous expenses, those for 1898 having included the circular as to the employment of unqualified assistants.

Table C shows that the average yearly expenditure of the General and Branch Councils for the past seven years has exceeded the average yearly income by £677 16*s.* 9*d.*

On June 8th, 1899, a resolution was passed by the General Council, on the recommendation of this committee, that money spent in the preparation of the British Pharmacopœia should not be charged as part of the expenditure of the year, but that a separate Pharmacopœia account should be kept. In order to show what would have been the effect of this resolution had it been in force during the past seven years a new Table D has been compiled, which shows that what may be called the normal expenditure of the Council has exceeded its income on an average by £912 13*s.* 6*d.* There seems no probability of the Council's income being largely increased in the near future, but this year the receipts from the Pharmacopœia will probably show a very considerable decrease; the money for the sinking fund, £215, which should come out of income, will have to be found, and if the recommendations of the Special Finance Committee be adopted the sum of £500 will have to be paid over to the Irish Branch Council; moreover, next year the election expenses, which in 1896 amounted to £488, will have to be met and in due course the inspection of examinations will re-commence, so that the Council ought seriously to consider whether it is not possible to reduce its expenditure to a very large extent. At present the Council is spending capital to the amount of over £600 a year.

In order to show how it is that of recent years the Council's expenditure has so largely exceeded its income a special Table E has been drawn out, from which may be seen the amount received for registration fees, which is the chief source of income, and the amounts paid for fees to members, printing, legal expenses, and interest on mortgage during the two septennial periods 1886-1892 and 1893-1899. It will be noticed that whereas the receipts are practically stationary the expenditure has largely increased, and this is due to the greater amount of work which now devolves upon the Council; its sessions are perforce longer, its committees are more numerous, and most of them have programmes and reports which all tend to increase the cost of printing, in addition to which there are the numerous reports on the inspection of the examinations of the Apothecaries' Hall of Dublin; the legal business is also greater and the premises have had to be enlarged to meet the increased demands for committee rooms.

The percentage rate has risen from 71·69 to 85·61.

Of the sum of £3000 authorised for the additions to the buildings, £2150 3*s.* 11*d.* was expended last year, since the close of which £779 12*s.* 11*d.* has been paid out, and there is still a balance of £49 due to the builders on the contract, which will make a total of £2979 2*s.* 10*d.*

A new Table J shows the total amount spent on the purchase of the freehold and on the alteration and furnishing of the premises of the Council up to March 31st, 1900. It may be pointed out that the interest on mortgage, £696 4*s.*, together with the sinking fund, £215 12*s.* 6*d.*, the total of the two being £911 16*s.* 6*d.*, are practically the rent which the Council pays for its premises, from which may be deducted £250, the rent received for No. 16, Hanover-square, making the net total £661 16*s.* 6*d.* In 49 years from now the Council will be living rent free.

With regard to the Pharmacopœia, 1898, a special Table H has been drawn up, showing the receipts and expenditure since it was taken in hand. The net profits to the end of 1899 amount to £924 13*s.* 6*d.*, and as in future the account is to be kept separate the committee suggest that as the Council has now reaped a substantial profit the proceeds shall no longer be treated as income, but placed to the credit of the Pharmacopœia account, in order, as far as possible, to avoid drawing on the funds of the Branch Councils when a new Pharmacopœia is in preparation.

Table G shows the assets of the three Branch Councils and the dental fund at the close of the last three years respectively, but owing to Consols being taken at the market value on Dec. 31st in each year it is very difficult to draw any conclusions as to increase or decrease and it might be well to follow the practice of many banks and in future value the stock at a fixed price, say £90, for the purpose of comparison.

Dental finance.—Table F shows that the receipts of the Dental Registration Fund for the year ending Dec. 31st, 1899, were £769 16*s.* 10*d.*, and the expenditure being £1101 10*s.* 7*d.* exceeds the income by £331 13*s.* 9*d.*, but in this account also the legal expenses for the two years are included and had it not been for this the excess of expenditure would have been £217 7*s.* 8*d.* The fund has latterly contributed more largely in paying its proportion to the fees paid to the General Council and this year the fees paid to the Dental Committee form a large item which is likely to be an annual one in future.

Mr. BRYANT moved that this report be received, entered on the minutes, and adopted.

Sir DYCE DUCKWORTH seconded the motion.

Mr. HORSLEY said that as the Council's resolution to grant £500 to the Irish Branch Council had been published in the minutes he begged to repeat to the Council what he had said in the committee—namely, that he entered his public protest against this expenditure. With regard to the report of the Finance Committee he did not propose any amendment, but it was scarcely possible to read a more awful report—a more terrifying report—because it showed that the Council's finances were in a hopeless state of confusion. At the present moment the Council did not know what their exact financial position was. That financial position

seemed to him to be without legal basis, for the Council were spending capital to the amount of over £600 a year. One of the tables accompanying the report showed that while the income in late years had remained stationary the expenditure had increased, the law expenditure as much as 108 per cent. during last year. With such expenditure before them how could this be called finance? He proposed to conclude by moving in accordance with a notice standing in his name on the paper.

The PRESIDENT pointed out that as the proposed motion was not in the nature of an amendment to the motion for the adoption of the report he thought the latter should be put to the Council before any new proposal was made.

The motion was then unanimously passed.

Mr. HORSLEY moved:—

That the whole question of the medical and dental funds of the General Medical Council and of the Branch Councils is again referred to the Finance Committee, together with the Trustees, whether members of the Council or not, and to report to the next session of the Council.

He said that the Council last session received alarming intelligence in regard to the finances and appointed a committee, such as he had mentioned in his motion, in order that the whole finance of the Council and Branches should be considered and a report given to the Council this session. He did not know why that committee had not carried out the instructions given to it, but had contented itself by granting £500 to the Irish Branch Council as a provisional measure. All he now asked was the re-appointment of the committee and that it should carry out its instructions. They could not discuss the matter unless they had a full detailed report from the committee and he hoped that would be forthcoming in November.

The PRESIDENT thought the Council should have a little more guidance. The motion was of the very widest kind. The whole medical and dental funds—their investments, capital, and income, and the various sources from which the income was derived—were brought within its scope, and he should like the treasurers to speak on the matter. If he had to carry out this proposal he should be slightly puzzled as to how to proceed.

Dr. BRUCE, who seconded the motion, said that the Council ought to know whether their financial position was improving or the opposite.

Mr. BRYANT, chairman of the Finance Committee, reminded the Council that their accounts were of necessity drawn up in a certain definite way because they were told by the Acts of Parliament how to divide their expenditure and show the different portions which were put out to the different Branches. Accordingly they had not a free hand. It was not a question of trouble at all, but he could not quite see how the Finance Committee could present more lucid statements than they did in present circumstances. However they might try to do better and make the accounts more clear, he was afraid that they should never succeed. They were certainly spending more than they received, but happily they had something to fall back upon, and the extra expenditure they had recently been incurring would, he thought, very shortly cease.

Dr. MACALISTER said that it was very difficult to know what particular questions had to be answered. He, also, should like a little more light thrown upon the meaning of the proposal and the matters that it was desired should be investigated. He thought that inquiry into the question what should be done with the Irish Branch Council was all that the committee had been asked to do. Whatever was wanted should be expressed.

Sir DYCE DUCKWORTH said it was quite clear that members of the Council did not study the tables of accounts. Some of the points which had been referred to in the discussion were set out on one of these tables, that giving a comparative statement of income and expenditure for the last three years. He thought it was forgotten that all the expenditure which had been incurred was expenditure which the Council had sanctioned. Of course, they had been spending a great deal more than in the former years when they sat in confined and insanitary premises. Then they were spending more on prosecutions, and legal expenses must and did mount up; but, after all, these sums of money represented very great activity, and if the Council were to do their duty their expenditure was hardly likely to decrease. No doubt that for fitting up the Council's extended premises would come to an end, and they were not likely to have any such outlay for a while again. The accounts of course were extremely complicated, but he did not see what was to be done under the terms of the motion. If specific questions were put the committee would do their best to make things plain to the intelligence of those who wished to be informed.

Mr. HORSLEY said that he could not conceal his astonishment at the speeches which he had just heard. There had been no attempt whatever on the part of the treasurers to dissipate the idea that the Council were in a financially unsound state. They could not dissipate that, for it came out in their own report. As to making the position better, there was no suggestion whatever, while there was not a particle of information afforded as to the exact position. What was wanted was a full statement of that position.

After some further discussion,

Dr. GLOVER hoped that the Financial Committee would accept the motion and accompany it with some suggestion for the adjustment of the income and expenditure. There was no harm in the motion, and if a suggestion was furnished by the committee it would form a basis for such a discussion as Mr. Horsley wanted. No member of the Finance Committee would argue that the present position was a satisfactory one, and therefore he supported the motion.

The PRESIDENT, while not objecting to the motion, remarked that he considered it was too general and he would like to have it so definite that the committee would know what they had to report upon. He was very anxious to arrive at something which they could unanimously agree upon.

With the approval of his seconder Mr. HORSLEY consented to his motion being unanimously passed in the following terms:—

That the special Finance Committee be requested to consider and report on (1) the financial position of the General Council and its branches as regards assets and liabilities; (2) the relation of the income and expenditure of the Council and its branches for the last ten years; and (3) the measures that appear to be desirable to place the finances on a satisfactory basis.

The session terminated with a vote of thanks to Sir William Turner, which was moved by Dr. GLOVER, seconded by Mr. BRYANT, and acknowledged.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations have been admitted Members of the College and have received their Diplomas:—

Rudolph George Abercrombie, Cambridge University and St. George's Hospital; Henry Cyril Adams, St. Bartholomew's Hospital; Bertram Cecil Robert Aldren, Edinburgh University; Thomas Shaw Arbuthnot, New York, Edinburgh, and St. Bartholomew's Hospital; William Arthur Bailey, University College and Royal Infirmary, Liverpool; Eric George Battiscombe, London Hospital; Charles Thomas Baxter, Middlesex Hospital; John Cunningham Bell, University College Hospital; Guy Black, St. Thomas's Hospital; Herbert Blackmore and Charles Henry Bradbury, Owens College and Royal Infirmary, Manchester; Arthur Hastings Bostock, St. Bartholomew's Hospital; John Bradford and Arthur Edmund Carver, Cambridge University and St. George's Hospital; Charles Henry Bullen, Mason University College and Queen's and General Hospitals, Birmingham; Hewlett Breton, John Beresford Christian, and Sidney d'Alton Corbett, St. George's Hospital; John Brocas Chambers Brockwell and Edward Cohen, Guy's Hospital; Thomas Burfield, Cambridge University and St. Thomas's Hospital; Edward Revely Clarke, Cambridge University and St. Mary's Hospital; Arthur Cubley, General Infirmary, Sheffield, and University College Hospital; David Leighton Davies and Charles Maxwell Ekins, University College Hospital; Henry Bertram Dismore and Charles Edwards, Guy's Hospital; Meredith Sedgwick Doubble and John Maltby Edwards, Charing-cross Hospital; William Claughton Douglass, St. Bartholomew's Hospital; John Scarborough Dudding and Samuel Jonathan David Esser, London Hospital; Harold St. Clair Elliott, Cambridge University and St. Bartholomew's Hospital; Charles Hy. Fennell, Oxford University and Charing-cross Hospital; Charles York Flewitt and Horace Wilberforce Freer, Mason College and Queen's and General Hospitals, Birmingham; Matthias Frederick Foulds, Owens College and Royal Infirmary, Manchester; Hugh Watson Fox and Edwin Wallace Goble, Guy's Hospital; Walter Burgess Fry, St. Thomas's Hospital; Shridhar Bheekaji Gadgil, Universities of Bombay and Calcutta and University College Hospital; Joseph Marcus Garman, London Hospital; Francisco José Gomez, King's College Hospital; William Ernest Gribbell, St. Mary's Hospitll; Leslie Haden Guest, Owens College and Royal Infirmary, Manchester, and London Hospital; Ernest Cutliffe Hadley, Mason University College and Queen's and General Hospitals, Birmingham; Donald George Hall, Cambridge and Edinburgh Universities; James Eder Harper, Durham, Birmingham, Guy's, London, and Westminster Hospitals; Sydney George Harrison, Charing-cross Hospital; Arthur Charles Haslam, St. Thomas's Hospital; Colin Sadler Hawes, Francis

Musgrave Howell, and Hy. Warwick Illius, St. Bartholomew's Hospital; Samuel Hey and William Morgan James, Cambridge University and St. Bartholomew's Hospital; Alfred Hewetson, St. Mary's Hospital; Thomas Higson and John Hoyle, Owens College and Royal Infirmary, Manchester; John Lupton Holt and Norman Alexander Aylmer Hughes, Yorkshire College and General Infirmary, Leeds; Archibald Douglas Jameson, St. Thomas's Hospital; Iain Mackinnon Jefferiss, King's College Hospital; Frederick Arthur Johns and Alfred Jones, London Hospital; George Joseph Alexis Leclezio, St. Bartholomew's Hospital; Frederick Samuel Leech, University College Hospital; John Lewis Lock, Cambridge University and St. Thomas's Hospital; Frederick William Longhurst, St. George's Hospital; John Augustus Noel Longley, Mason University College and Queen's and General Hospital, Birmingham; Charles John Nepean Longridge, Owens College and Royal Infirmary, Manchester, and St. George's Hospital; William James Lord, University College and Royal Infirmary, Bristol; William Henville Lowman, King's College Hospital; Frederick John McCann, Edinburgh University and King's College Hospital; Louis Charles Martin and Ernest Alfred Miller, Guy's Hospital; Charles Cecil Wildman Mayo, University College and General Infirmary, Sheffield; Richard Milnthorpe, Yorkshire College and General Infirmary, Leeds; Arthur Hy. McNeill Mitchell, St. Mary's Hospital; Adolph Andreas Christian Möllar, College of Medicine and Royal Infirmary, Newcastle-on-Tyne; Richard John Morris, Queen's College, Cork, and St. Bartholomew's Hospital; James Robert Mortoa, London Hospital; Reginald Cuthbert Mullins, Oxford University and Guy's Hospital; Sheffield Hy. Morier Neave, St. Bartholomew's Hospital; Cyril Alfred Rankin Nitch, St. Thomas's Hospital; Thomas Christian Orford, Owens College and Royal Infirmary, Manchester; Lionel Edward Orton, and Edward Albert Bodenham Poole, Mason University College and Queen's and General Hospitals, Birmingham; William Panckridge Panckridge, Middlesex Hospital; Edward Melville Bruce Payne, Charles Roberton Porter, and Michael Foster Reaney, London Hospital; Sydney John Peake, King's College, Hospital; Thomas Massey Pearce, St. Bartholomew's Hospital; Harold Cooper Pretty and Arthur Izod Sheldon, University College Hospital; Frederick Schofield Rhodes, Owens College and Royal Infirmary, Manchester, and Middlesex Hospital; Charles Haldane Denny Robbs, St. Bartholomew's Hospital; Frederick James Faulkland Rooke and John Salmon Smith, Middlesex Hospital; Cuthbert Fennessy Selous, St. Thomas's Hospital; Hugh Frederick Sheldon, Owens College and Royal Infirmary, Manchester; George Herbert Simpson, St. Mungo's College, Glasgow, and University College Hospital; Stephen Francis Smith and Alfred Bertram Soltau, London Hospital; Hy. Edmund Symes-Thompson, Cambridge University and St. George's Hospital; Percy Tatchell and Albert John Walton Wells, St. Bartholomew's Hospital; William Irwin Taylor, Trinity University, Toronto; Basil Hubert Howard Tripp and Hardy Vesey Wells, St. Mary's Hospital; Harold Arthur Upward, Cambridge University and London Hospital; Francis Peter Vieyra, Madras University; Cyril Charles Coleby Kirke White, St. Bartholomew's Hospital; Edward White, University College and Royal Infirmary, Bristol; Thomas Wood, Cambridge University and Middlesex Hospital; and William John Young, University College and Royal Infirmary, Liverpool.

UNIVERSITY OF LONDON.—At the M.B. Examination held in May the following candidates were successful:—

First Division.—Herbert Cecil Barlow, Westminster Hospital; John Thomas Dunston, Guy's Hospital; Alfred Gordon Ede, and Arthur Tregelles Pridham, St. Bartholomew's Hospital.

Second Division.—Cornelia Bonté Sheldon Amos, London School of Medicine and Royal Free Hospital; Thomas Anstey-Chave, St. Bartholomew's Hospital; Alfred John Vernon Bette, Westminster Hospital; Isobel Sarah Bryson, Royal Free Hospital; Lewis Cook, Westminster Hospital; David Leighton Davies, University College; Alexander Fraser, Guy's Hospital; Cecil Scarlett Frost, St. Bartholomew's Hospital; George Robert Harcourt, St. Thomas's Hospital; Francis Joseph Hasslacher, King's College; Ernest William Holyoak and John William Hunt, St. Mary's Hospital; William Sam Inman, University College, Sheffield; David Thomas Cadvan Jones, University College; Charles Voughton Knight, St. Bartholomew's Hospital; Charles James Izzard Krumbholz, University College; William Henville Lowman, King's College; Maurice Taylor Male, University College; Ernest Alfred Miller, B.Sc., Guy's Hospital; Frank Mayo Morris, London Hospital; Richard Rothwell Mowll, King's College; Harold Rothery Nutt, St. Mary's Hospital; George Chetwode Owsley, Guy's Hospital; William Panckridge Panckridge, Middlesex Hospital; Thomas Perrin, St. Thomas's Hospital; George Edward James Antoine Robinson, University of Dublin and Royal College of Surgeons, Ireland; Henry Harold Scott, St. Thomas's Hospital; Nigel Frampton Stallart, University College; William Stuart Vernon Stock, University College, Bristol; Rhys Tudor Thomas, University College; Robert Lewis Thornley, St. Bartholomew's Hospital; Sydney Gordon Tippett, Westminster Hospital; Frank Douglas Turner, Guy's Hospital; and Lewis Augustus Walker, St. Bartholomew's Hospital.

N.B.—The foregoing list, published for the convenience of candidates, is provisional only, and is not final until the reports of the examiners shall have been confirmed by the Senate.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Fellows held on June 4th the following were elected for the ensuing year:—President: Mr. T. Myles. Vice-President: Mr. L. H. Ormsby. Honorary Secretary: Sir Charles Cameron, C.B. Council: Mr. A. H. Jacob, Sir Philip Smyly, Sir William Stokes, Mr. H. R. Swanzy, Mr. E. H. Bennett, Sir Charles Cameron, C.B., Dr. A. Meldon, D.L., Mr. C. B. Ball, Mr. R. L. Swan, Sir William Thomson, Mr. J. B. Story, Mr. J. Lentaigne, Mr. A. Chance, Mr. J. J. Cranny, Mr. R. D. Purefoy, Mr. H. G. Sherlock, Mr. R. B. McCausland, Mr. Graves Stoker, and Mr. F. Conway Dwyer.

UNIVERSITY COLLEGE, BRISTOL.—A laboratory has been established in connexion with the bacteriological department in which the examination of all kinds of morbid material is undertaken for medical men. Arrangements have also been made for medical men and others personally to undertake experiments in the laboratory.

DEATH FROM THE STING OF A BEE.—Mr. Greenaway, "bee expert" to the Monmouthshire County Council, and his niece were visiting the stock of bees belonging to a clergyman near Chepstow on May 21st, when the young lady was stung by a bee and she expired within half an hour afterwards. Medical evidence showed that death resulted from cardiac syncope produced by the sting, and at the inquest a verdict to that effect was returned.

PRESENTATION TO A MEDICAL MAN.—Mr. David Thomas, F.R.C.S. Eng., L.R.C.P. Lond., of Manly, Sydney, New South Wales, prior to his leaving in January last for some months on account of ill-health, was presented with a testimonial and a purse containing 195 sovereigns to be expended in London on the purchase of a suitable gift from the "people of Manly." He was also the recipient of a smoker's companion from his club patients.

THE CHARING-CROSS HOSPITAL EXHIBITS AT EARL'S COURT.—In connexion with the article on the Charing-cross Hospital Exhibits at Earl's Court which appeared in THE LANCET of June 2nd (p. 1607), we think it right to add a few words of acknowledgment of the valuable assistance rendered by Mr. Marcus E. Collins, architect, of 61, Old Broad-street, E.C., one of the vice-presidents of the hospital, who undertook the organisation and architectural arrangements of the exhibits.

A QUESTION OF VACCINATION.—At the Taunton police-court on May 26th a medical practitioner of the town was charged with having signed a certificate stating that a child was successfully vaccinated, such certificate being false. The board of guardians prosecuted and two of the district medical officers proved that the child was not successfully vaccinated. The defendant pleaded guilty and was fined £3 10*s*. He said that he had vaccinated the child but owing to illness could not see if the operation was successful and so he gave the certificate on the statement of the mother.

THE PROPOSED MEMORIAL TO THE LATE MR. G. J. SYMONS, F.R.S.—At the invitation of the president of the Royal Meteorological Society a meeting was held at the rooms of the society on Thursday afternoon, May 31st, to consider the question of a memorial of the late Mr. G. J. Symons, F.R.S., the distinguished meteorologist and founder of the British Rainfall Organisation. It was resolved unanimously that the memorial should take the form of a gold medal, to be awarded from time to time by the Council of the Royal Meteorological Society for distinguished work in connexion with meteorological science. The meeting appointed an executive committee representing many of the societies with which Mr. Symons was associated to take the necessary steps to raise a fund for that purpose. Contributions will be received by the assistant-secretary, Mr. W. Marriott, 70, Victoria-street, Westminster.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ADAMS, A. J. B., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

ASH, THOMAS LINNINGTON, L.R.C.P. Edin., M.R.C.S., L.S.A., J.P., has been appointed a Member of the Examining Staff of the St. John Ambulance Association.

ATKINS, SYDNEY ERNEST, L.R.C.S. Irel., L.S.A. Lond., has been appointed Medical Officer of Health and Public Vaccinator for the North Lew District by the Okehampton (Devon) Board of Guardians.

BEALE, H. R., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

BENNETT, F. T., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Ham and Coombe Sanitary Districts of the Kingston Union.

BERRY, T. P., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Second Assistant Medical Officer of the St. Saviour's Infirmary, East Dulwich-grove, vice J. W. Pridmore, resigned.

BEVAN, A., L.R.C.P., M.R.C.S., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

BLACK, G., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

BOURDAS, E. C., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

CAVENAGH-MAINWARING, W. R., M.B., Ch.B. Adel., has been appointed Honorary Assistant Surgeon, also Honorary Joint Pathologist, of the Adelaide Hospital, South Australia.

COSTELLO, M. J. B., M.B., B.Ch. Irel., has been appointed Medical Officer for the Workhouse and Dispensary District of Glenamaddy.

COURT, E. P., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Sanitary District of Hambledon, Droxford Union, vice J. W. Jeram, resigned.

CUNNINGHAM, J. F., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

DALLEY, W. C., M.R.C.S., has been re-appointed Medical Officer and Public Vaccinator for the Syston Sanitary District of the Barrow-upon-Soar Union.

DUDGEON, L. S., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

EVE, F. C., B.A., M.B., B.C. Cantab., has been appointed House Physician to St. Thomas's Hospital.

GATES, E. A., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

GILES, W. A., M.B., Ch.M. Edin., has been appointed Honorary Surgeon of the Adelaide Hospital, South Australia.

GIMSON, K. C., M.B., B.C. Camb., has been appointed Medical Officer *pro tem.* by the Witham Urban District Council.

HABERJUM, E. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Second Sanitary District of the Parish of St. George-in-the-East, London, vice E. M. Thuresson, resigned.

HARWOOD, H. M., M.A., M.B., B.C. Cantab., has been appointed Assistant House Physician to St. Thomas's Hospital.

HAMILTON, A. A., M.B., Ch.B. Dubl., has been appointed Honorary Assistant Physician of the Adelaide Hospital, South Australia.

HAMILTON, J. A. G., M.B. Dubl., L.R.C.S. Edin., has been appointed Honorary Assistant Gynæcologist, Adelaide Hospital, South Australia.

HAWKINS, C. L., M.A., M.B., B.C. Cantab., L.R.C.P. M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

HAY, T. W., M.B., C.M. Glasg., has been appointed Medical Officer for the No. 5 Sanitary District of the Newcastle Union, vice T. Scotland.

HAYWARD, W. F., L.K.Q.C.P. Irel., M.R.C.S., has been appointed Honorary Physician of the Adelaide Hospital, South Australia.

HEDLEY, R. W., M.A., M.B., B.C. Cantab., has been appointed House Physician to St. Thomas's Hospital.

HOWLETT, B. F., L.R.C.P., M.R.C.S., has been appointed Junior Obstetric House Physician to St. Thomas's Hospital.

JAY, M. R. H., L.R.C.P. Lond., M.R.C.S., has been appointed Honorary Assistant Surgeon of the Adelaide Hospital, South Australia.

JONES, A. WEBB, L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

KELSON, W. H., M.D., B.S. Lond., F.R.C.S., has been appointed Honorary Surgeon in Charge of the Throat, Nose, and Ear Department, City Dispensary, London.

KING, J., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of Health by the Bude and Stratton Urban District Council.

KINLOCH, R. B., L.R.C.P., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

KNOWLES, BEATRICE, M.B., B.S. Lond., has been appointed Second Assistant Medical Officer for the new Infirmary by the Bathnal Green Guardians.

MARTIN, A. E., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

NITCH, C. A. R., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

POMFRET, H. W., M.D. Viet., F.R.C.S. Eng., has been appointed Medical Officer for the Eighth Sanitary District of the Ashton-under-Lyne Union.

POULTON, B., M.D. Melb., M.R.C.S., has been appointed Honorary Surgeon of the Adelaide Hospital, South Australia.

PRIESTLEY, C. E., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Thingoe Union, vice C. S. Kilner, resigned.

ROBERTS, J. LLOYD, M.D., B.S., B.A., B.Sc. Lond., F.R.C.S., has been appointed Honorary Physician to the Liverpool Stanley Hospital, vice R. J. Richardson.

SELOUS, C. F., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

SMITH, ALFRED CHARLES FESTING, L.R.C.P. & S. Edin., L.F.P.S. Glasg., Civil Surgeon, has been appointed *pro tem.* to the Medical Charge of Troops at Bull Point, Plymouth.

STACK, M. T., M.B., C.M. Glasg., has been appointed Medical Officer for the Wavertree Sanitary District of the West Derby Union, vice R. Wearing, deceased.

STREET, A. F., M.D. Camb., M.R.C.S., D.P.H., has been appointed Medical Officer for the Children's Home at Westgate-on-Sea.

SWIFT, H., M.D. Cantab., M.R.C.S., has been appointed Honorary Assistant Physician of the Adelaide Hospital, South Australia.

SYMONS, M. J., M.D., Ch.M. Edin., has been appointed Honorary Ophthalmologist of the Adelaide Hospital, South Australia.

TANAKI, Y., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

TOMLINSON, W. R., L.K.Q.C.P. Irel., L.R.C.S., has been re-appointed Medical Officer of the Moree Hospital, New South Wales.

UNSWORTH, N., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

VERCO, J. C., M.D. Lond., F.R.C.S. Eng., has been appointed Honorary Physician of the Adelaide Hospital, South Australia.

WAY, E. W., M.B. Edin., L.R.C.P. Lond., M.R.C.S., has been appointed Honorary Gynæcologist to the Adelaide Hospital, South Australia.

WYCHE, E. M., L.R.C.P. Lond., M.R.C.S., D.P.H., has been appointed Medical Officer for the Haddenham Sanitary District of the Ely Union, vice B. H. Andrew, resigned.

Vacancies.

For further information regarding each vacancy reference should made to the advertisement (see Index).

BIRKENHEAD AND WIRRAL CHILDREN'S HOSPITAL, Woodchurch-road, Birkenhead.—House Surgeon for twelve months. Salary £100 per annum, with board, residence, and laundry.

BIRMINGHAM CITY ASYLUM, Rubery-hill, Barnt-green, S.O., Worcestershire.—Senior Assistant Medical Officer.

BEDFORD COUNTY HOSPITAL.—Senior House Surgeon for one year. Salary £100, with apartments, board, and washing.

BOROUGH OF BOOTLE, HOSPITAL FOR INFECTIOUS DISEASES.—Resident Medical Superintendent, unmarried. Salary £120 per annum, with board, washing, and apartments in the hospital. Applications to be addressed to the Chairman of the Hospital Sub-committee, Town-hall, Bootle.

BOROUGH HOSPITAL, Birkenhead.—Resident Junior House Surgeon. Salary £75 a year, with certain fees usually obtained.

BRISTOL ROYAL HOSPITAL FOR SICK CHILDREN AND WOMEN.—House Surgeon. Salary £120 per annum, with rooms and attendance (not board).

CARLISLE DISPENSARY (not Provident).—Resident Surgeon, unmarried. Salary £150 per annum, with apartments (not board).

CARMARTHEN UNION.—Medical Officer and Public Vaccinator, to reside at Conwil, for the Conwil (a Welsh) District. Salary £60, with certain extra medical fees. Applications to the Clerk, 7, Hall-street, Carmarthen.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Pathologist. Tenable, subject to annual re-appointment, for not more than three years.

COUNTY ASYLUM, Whittingham, Lancashire.—Junior Assistant Medical Officer, unmarried. Salary commencing at £125 per annum, increasing conditionally to £250, with furnished apartments, board, attendance, and washing.

CORPORATION OF BIRMINGHAM—CITY HOSPITAL, Lodge-road.—Assistant Medical Officer. Salary £120 per annum, with board, residence, &c.

COTSWOLD SANATORIUM FOR THE OPEN-AIR TREATMENT OF TUBERCULOSIS.—Assistant Medical Officer. Salary to commence at £120 per annum and all found. Apply to Dr. S. T. Pruen, Sherborne Lodge, Cheltenham.

COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer, unmarried. Salary commences at £125 per annum, with prospect of increase to £250, with furnished apartments, board, attendance, and washing.

CRAIGLEITH POORHOUSE AND HOSPITAL, Edinburgh.—Medical Officer, resident. Salary £100 per annum, with board and apartments. Apply to the Clerk, Parish Council Chambers, Castle-terrace, Edinburgh.

DENBIGHSHIRE INFIRMARY, Denbigh.—House Surgeon for 12 months. Salary £80, with board, residence, and washing.

DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—House Surgeon and Assistant House Surgeon for twelve months. Salary of House Surgeon £100 per annum. Assistant House Surgeon £50, with furnished apartments, board, and washing in both cases.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY, Dumfries.—House Surgeon. Salary £50 per annum, with board and washing.

GENERAL HOSPITAL, Birmingham.—Pathologist, subject to annual re-election for five years. Salary £100 per annum, with board and residence.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, London.—House Physician for six months. Salary at the rate of £60 per annum, and board, lodging, and washing in the hospital. Also Junior House Physician, for six months. Salary at the rate of £30 per annum, and board, lodging, and washing in the hospital.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physicians for six months, with an honorarium of £25.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, London.—House Surgeon for six months, unmarried. Salary £20, with board and residence in the hospital. Also House Physician for six months, unmarried. Salary £20, with board and residence in the hospital.

KENSINGTON DISPENSARY.—Resident Medical Officer, unmarried, Salary £125 per annum, with furnished apartments, coals, gas, and attendance. Applications to the Honorary Secretary, 56, Bedford-gardens, Campden-hill, Kensington, W.

LIVERPOOL STANLEY HOSPITAL.—Junior House Surgeon. Salary £70, with board, lodging, and washing.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL AND DISPENSARY, Loughborough.—Resident House Surgeon. Salary £100 per annum, with furnished rooms, attendance, and board.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Medical Officer for six months. Salary £60 per annum, with board, attendance, and washing.

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant House Surgeon for six months. Honorarium £20, and board, lodging, and washing.

NORTHAMPTON GENERAL INFIRMARY.—House Surgeon, unmarried. Salary £125 per annum, with furnished apartments, board, attendance, and washing. Also Assistant to the House Surgeon for six months. Board, lodging, and washing provided, and an honorarium of £25 given.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, London.—House Surgeon for six months. Salary at the rate of £80 per annum, with board, residence, and laundry. Also House Physician for six months. Salary at the rate of £60 per annum, with board, residence, and laundry. Apply to the Secretary, City Office, 27, Clement's-lane, Lombard-street, E.C.

NORTH RIDING ASYLUM, Clifton, York.—Senior Assistant Medical Officer, unmarried. Salary £125, rising £10 annually to £175, with board, furnished apartments, washing, and attendance.

NOTTINGHAM GENERAL DISPENSARY.—Assistant Resident Surgeon, unmarried. Salary £140 per annum, all found except board.

OLDHAM INFIRMARY.—Senior House Surgeon for one year. Salary £85 per annum, with board, washing, and residence.

PARISH OF FULHAM.—Second Assistant Medical Officer at the Infirmary, Fulham Palace-road, W., for six months. Salary £60 per annum, with board, furnished apartments, and washing.

QUEEN'S HOSPITAL, Birmingham.—House Physician and House Surgeon for twelve months. Salary £50 per annum, with board, lodging, and washing.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House Surgeon. Salary £60 a year, with board, lodging, and washing.

ROYAL BERKS HOSPITAL, Reading.—House Surgeon. Salary £60 per annum, with board, lodging, and washing. Also Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing. Both appointments for one year.

ROYAL HALIFAX INFIRMARY.—Third House Surgeon, unmarried. Salary £50 per annum, with residence, board, and washing.

ROYAL LONDON OPHTHALMIC HOSPITAL (MOORFIELDS EYE HOSPITAL), City-road.—Assistant Surgeon.

SALOP INFIRMARY, Shrewsbury.—Assistant House Surgeon for six months. Salary at the rate of £40 per annum, with board and washing.

SEAMEN'S HOSPITAL SOCIETY, Greenwich, S.E.—Honorary Anæsthetist for twelve months.

SOMERSET HOSPITAL, CAPE TOWN.—Assistant Resident Surgeon. Apply to the Medical Agency, 112, Victoria-street, S.W.

ST. OLAVE'S UNION.—Medical Officer for the Children's Home, "The Poplars," Peckham Rye, S.E. Salary £75 per annum, subject to statutory deductions. Apply to the Clerk to the Guardians, Union Offices, Tooley-street, S.E.

STROUD GENERAL HOSPITAL.—House Surgeon. Salary £80 per annum, with board, lodging, and washing.

SWANSEA GENERAL AND EYE HOSPITAL.—House Physician for twelve months. Salary £50 per annum, with board, apartments, washing, and attendance.

TEIGNMOUTH HOSPITAL, South Devon.—House Surgeon. Salary £50 a year, with board, lodging, and washing. £6 per annum, given in lieu of stimulants.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House Surgeon. Salary £100 a year, with board, lodging, and washing.

YORK DISPENSARY.—Resident Medical Officer, unmarried. Salary £110 a year, with board, lodging, and attendance.

Births, Marriages, and Deaths.

BIRTHS.

BURROWS.—On June 2nd, at The Haven, Harrow, the wife of Harold Burrows, M.B., of a son who only survived his birth a short time.

GREY.—On June 3rd, at Strathtay, Perthshire, N.B., the wife of Harry Grey, M.B., C.M., San Remo, Italy, of a son.

PURVIS.—On May 30th, at Montague-villas, Coleraine-road, Westcombe-park, the wife of Alfred Purvis, M.R.C.S., L.R.C.P., of a daughter.

SMITH.—On June 3rd, at Lynton House, Warrington, the wife of Reginald Smith, M.R.C.S., L.R.C.P., of a daughter.

MARRIAGES.

BAKER—HANCE.—On May 25th, at Holy Trinity, Bath, Albert Baker M.D., to Caroline, youngest daughter of the late Henry Hance, of Old Brompton, London.

LIVESAY—LEYDE.—On June 1st, at St. Giles's Cathedral, Edinburgh, Arthur W. B. Livesay, Surgeon, Royal Navy, Chatham Dockyard, to Sharlie E. Leyde, daughter of the late Otto T. Leyde, R.S.A., St. Bernard's-crescent, Edinburgh.

LOGAN—CHAMBERLAIN.—On June 6th, at the parish church, Solihull, Warwickshire, Roderic Robert Walter Logan, M.R.C.S., of Ashby-de-la-Zouch, to Frances Ethel, youngest daughter of George K. Chamberlain, of Leamington House, Malvern Wells.

SESSIONS—COLLINSON.—On June 6th, at the Friends' Meeting House, Halifax, Frederick Leonard Sessions, M.R.C.S. Eng., L.R.C.P. Lond., of Evesham, Worc., to Ethel Mary, only daughter of Joseph Collinson, of Halifax, Yorks.

SWAYNE—LYON.—On June 2nd, at All Saints', Upper Norwood, Francis Griffiths Swayne, M.A., M.B., of Church-road, Upper Norwood, to Etta Ellen, widow of G. K. Lyon, H.M.I.C.S., and third daughter of Warren Hastings D'Oyly, of Southsea and London.

WADE—GREGORY.—On June 2nd, at St. John's Church, Upper St. Leonards-on-Sea, Charles H. Wade, M.A. Oxon, M.R.C.S., F.L.S., of Royal-terrace, Southend-on-Sea, to Eva, only surviving child of the late Rev. A. T. Gregory, formerly rector of Trusham.

DEATHS.

FITZ-PATRICK.—On May 31st, at Sussex-gardens, Hyde Park, Thomas Fitz-Patrick, M.D., M.R.C.P.

MOGER.—About May 30th, suddenly, Frederick Slade Moger, M.R.C.S., L.R.C.P., of Finchley, aged 63 years.

STAMPER.—On May 22nd, at Pembroke-street, Pembroke Dock, South Wales, James Fenton Stamper, M.D., J.P., aged 62 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

WHERE MEDICAL ETIQUETTE IS IGNORED.

THE Bridgend and Cowbridge Board of Guardians have evidently no great passion for medical etiquette. The union covers a large area with two distinct classes of population. On the eastern side is the agricultural section, whilst the other district is maintained chiefly by collieries. They have a number of medical officers at various places, each having a prescribed district. At Maesteg Dr. John Davies is the medical officer for the union and his district adjoins that of the Tondu and Aberkenfig, where Dr. Jones acts as the medical officer. Dr. Jones is also the "works doctor" for the neighbouring collieries under Messrs. North's Navigation Company and Dr. Davies until recently filled a similar position at Maesteg. Thus in these dual offices both medical gentlemen were on the best of terms and in constant communication with each other. Some time ago a man employed at North's Collieries, Tondu, was injured. He was attended upon by Dr. Jones as the works medical officer. He resided at the extreme end of Dr. Davies's parish district. A protracted illness necessitated the injured man applying for the pittance doled out by the administrators of relief. He had a daughter at home whom the guardians in their wisdom thought should be in service, and as the case, so far as the guardians were concerned, was in Dr. Davies's district they instructed him to inquire whether she was not fit to earn her own living. Dr. Davies, knowing that Dr. Jones was attending, sent the inquiry on to him and he replied that she was not fit for service. When this report was read out at the meeting of the guardians a few weeks ago Dr. Davies was asked to explain why he had not made his own report on the case and was also told that he must attend a meeting of the guardians. Dr. Davies gave his reason for not attending personally on the case to the effect that as Dr. Jones was then attending at the house such a visit was hardly necessary. It was explained by one of the guardians that there was an arrangement between the two medical officers. Dr. Davies was also unable to be present at the meeting. This, however, did not appease the more precise members of the guardians and by a resolution of the members Dr. Davies was informed that if he had no better explanation to give the matter would be reported to the Local Government Board, and the chairman added to this that Dr. Davies must attend the first possible meeting of the board. This interview took place recently and the medical officer explained that he could not examine the girl himself knowing she was under treatment by Dr. Jones. Such a course would be highly improper for any medical man to do. The chairman of the board (Archdeacon Edmondes), however, did not agree with this and pointed out that whenever an order was sent to an officer of the board they expected him to comply with that order and not take the version of another medical man. Dr. Davies pointed out the difficulty which would arise and the friction which must ensue by the board's medical officer attending a case which was under treatment by the works doctor and that it would be a grave breach of the etiquette of the profession. This, however, was not regarded in the same light by the board and although they accepted the medical officer's explanation in this case they gave him clearly to understand that the orders of the board were inexorable and they neither regarded the etiquette nor friction of the profession, but that their instructions must be rigidly observed.

"WORD BLINDNESS."

To the Editors of THE LANCET.

SIRS,—Could not raised type, or that used by the blind, be employed by sufferers from this deficiency? Might not experiments on these lines prove instructive? Possibly by these means the patients might be so much assisted as ultimately to learn to read in the ordinary way. For information as to whether this has ever been attempted I should be much obliged. I am, Sirs, yours faithfully,

Upper Bedford-place, W.C., June 2nd, 1900. C. G. S. MENTEATH.

THE CONCILIATION BOARD.

To the Editors of THE LANCET.

SIRS,—For the last few years letters have constantly appeared in the medical journals touching upon the question of club doctors and their pay. It is now, I believe, proposed that a conciliation board shall be constituted for the purpose of discussing the matter in conjunction with delegates from various friendly societies. What good will it do? Indeed, I would ask if there are not gentlemen upon the Council of the British Medical Association who themselves take club patients on the lowest possible terms of remuneration. If this be the case (and it certainly is so in one instance) how can one wonder that men who do not hold such an exalted (?) position in the medical world should do the same? No, Sirs, the remedy is with the club doctor himself. Let him refuse to accept club patients on the terms dictated by the clubs and things, I am inclined to think, would soon be altered, but so long as club doctors take office in clubs as treasurers, committeemen, &c., and attend their annual dinners and

make speeches in which they express their pleasure at being allowed to hold the position of surgeon and generally lead the club members to think what a blessing such a position is, so long will the clubs pay what they do and at the same time be under the impression that such a payment is adequate. Last Christmas, owing to the amount of work done in the previous year, and also owing to the fact that farmers and their sons were members, I resigned two clubs with the result that most of the members, if not all, are now my private patients, and I have received from them in cash this year more than I should have received for the whole year had I still continued to doctor for the two clubs.

I am, Sirs, yours faithfully,

May 28th, 1900. X. Y. Z.

"THE CASE OF THE LATE MR. ALFRED BOURNE."

To the Editors of THE LANCET.

SIRS,—I am requested to thank you for the insertion in THE LANCET of May 26th (p. 1566) of the list of subscriptions to the above fund. I enclose a second list, and we shall be very grateful if we may again trespass on your valuable space and kindness.

We are, Sirs, yours faithfully,

G. YEOMAN,

pp. J. A. Hutchinson, M.D. Durh., and others.

Northallerton, May 30th, 1900.

	£.	s.	d.
Dr. P. Frank, London ...	3	3	0
Mr. Boville, Osmotherley	2	2	0
Mr. T. Yeoman, Osmotherley	2	2	0
Mr. T. Horsfall, Bedale ...	1	1	0
Mr. Walker Stead, Northallerton	1	1	0
Mr. R. E. Unthank, Appleton-Wiske	1	1	0
Dr. W. M. Yeoman, Stokesley...	1	1	0
Mrs. J. Yeoman, Northallerton	1	1	0
Mr. W. Brown, Northallerton	1	0	0
Mr. J. Vasey, Northallerton	1	0	0
Mr. C. Alexander, Northallerton	10	6	
Mr. J. W. Roberts, Knayton	10	0	
Miss A. Yeoman, Northallerton	10	0	
Mr. N. R. Wilson, Northallerton	5	0	
"Dat"	5	0	
"Anon."	5	0	
Mr. S. Jackson, Northallerton	5	0	
Mr. C. Peacock, Northallerton	5	0	
Mr. H. Fairburn, Northallerton	5	0	
Mr. H. Ayre, Northallerton	5	0	

INTOLERANCE.

To the Editors of THE LANCET.

SIRS,—I shall be glad if you will give me your opinion and advice on the following case and if you will kindly insert my letter in your correspondence columns. A is the only qualified man residing in a certain village where there are a number of works, collieries, &c. He is in attendance for a considerable time on all of the employés. A section of the population belongs to a certain religious denomination of which A is not a member. They determine to have a man of their own creed and with this object introduce a qualified man B. Some of the leading officials are co-religionists of B's and they use all their influence to substitute B in place of A as medical attendant to the men employed in the collieries, &c., to which they (the officials) belong. Many of the men object to employ the newcomer as they have every confidence in A, and, also, they naturally argue that every man should be at liberty to employ the professional services of whomsoever he chooses. The adherents of A hold several meetings and requests are forwarded to the different works that A shall continue to receive the money periodically paid in for medical attendance on the men. The officials, friends of B, offer the men an ultimatum—that they shall transfer their subscriptions to B or else take a month's notice to leave their employment. Most of the men submit to the wishes of the officials, but many privately engage the services of A, refusing to be attended by B, to whom, nevertheless, they are still compelled to pay their subscriptions. Those who refuse to pay him are discharged from their employment. Having placed all the circumstances of the case before you I will now ask you, Sirs, firstly, is not such coercive action on the officials' part contrary to English law; is it not, in fact, a violation of the terms of the Truck Act? and, secondly, if such conduct is illegal to whom should complaint be made—the Board of Trade or the General Medical Council?

I am, Sirs, yours faithfully,

June 5th, 1900. VIGILANS.

* * The Truck Act prevents the practice of paying the wages of workmen in goods instead of money. We doubt if the action of the official is a violation of this Act, but only a lawyer can express an opinion. If legal confirmation of the view that the Truck Act has been violated is forthcoming the plaintiffs would have to be the workmen.—ED. L.

"DRUG HABITS."

To the Editors of THE LANCET.

SIRS,—A correspondent in THE LANCET of June 2nd, p. 1634, writes on the above subject: "Now the proper and humane treatment is to give the drug in gradually diminishing doses and not to totally withdraw it"; and, again, "The medical man should think of the suffering and perhaps death that may follow its sudden withdrawal." This teaching seems to be a continuation of the old teaching of the late Dr. Watson who, writing of alcohol, says: "Give him a hair of the dog that bit him." The late Sir Andrew Clark used to teach that "alcohol and all drugs when they were taken in excess were all alike—poisons," and that they should be entirely and immediately withdrawn. I have acted on this advice for over 20 years and have never yet had reason to regret my action. Still, the sad fact remains that many still follow the old routine and, what is more, they believe in it, and certainly in alcoholic cases frequently take away the only chance of curing their patients. The view of your experienced readers would be very interesting.

I am, Sirs, yours faithfully,

Putney, S.W., June 5th, 1900. A. S. MORTON, M.D. Durh.

WE have a paper marked for insertion detailing a fatality to a woman in a laundry. Will the author kindly send his name and address, which have not been affixed to his manuscript?

Reformer.—The person is not a medical man, but in the present state of the Medical Acts no penalty attaches to his giving medical aid unless he pretends to be a medical man, and even then a prosecution might not result in a conviction. As he is not a member of the medical profession he of course cannot be prevented by the General Medical Council from advertising.

W. M.—The assistant should clearly not make such statements.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewardt's Instruments.)

THE LANCET Office, June 7th, 1900.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb	Remarks at 8.30 A.M.
June 1	30·14	N.	...	64	55	49	49	50	Raining
,, 2	30·03	N.E.	0·10	102	64	49	52	53	Overcast
,, 3	29·85	N.E.	...	107	68	52	57	60	Fine
,, 4	29·88	N.E.	...	124	79	53	57	63	Hazy
,, 5	29·85	N.E.	...	110	64	49	50	54	Cloudy
,, 6	29·96	N.W.	...	111	77	50	51	56	Hazy
,, 7	29·85	W.	0·04	107	67	55	55	57	Showery

During the week marked copies of the following newspapers have been received: *Redditch Indicator, Sussex Daily News, Newcastle Daily Chronicle, Alliance News (Manchester), Westminster Budget, Lancashire Daily Post, South Wales News, Sydney Daily Telegraph, Leeds Mercury, Glasgow Herald, Bolton Journal, Manchester Guardian, Birmingham Daily Post, West Morning News, Times of India, Pioneer Mail, Architect, Scotsman, Builder, Citizen, Liverpool Daily Post, Brighton Gazette, Grimsby News, Bristo Mercury, Madras Times, Yorkshire Post, South Eastern Gazette, Norfolk Daily Standard, Local Government Chronicle, Mining Journal, Hertfordshire Mercury, City Press, Reading Mercury, Drogheda Advertiser, Royal Cornwall Gazette, Horse Guards Gazette, Leicester Daily Post, Coventry Daily Telegraph, Builders' Journal, Warrington Observer, Surrey Advertiser, Walsall Observer, Local Government Journal, Essex Weekly News (Chelmsford), Australasian Medical Gazette, Ayrshire Post, Barking Advertiser, Buckingham Express, Sleaford Journal.*

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (11th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (13th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt.

Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.)

THURSDAY (14th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (15th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), Lonpon Throat (2 P.M. and 6 P.M.).

SATURDAY (16th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (11th).—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square, W.C.).—7 P.M. Council Meeting. 8 P.M. Annual General Meeting. Mr. F. Eve will show a Patient with an unusually large Dental Cyst. Communication:—Mr. W. R. Read: A Case of Alveolar Abscess terminating Fatally. Casual Communication:—Mr. W. R. Humby. President: Valedictory Address.

TUESDAY (12th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Paper:—Mr. Rickman Godlee: On some of the Medical and Surgical Complications of Pyorrhœa Alveolaris.

THURSDAY (14th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Cases and Card Specimens. 8.30 P.M. Papers:—Mr. W. H. Jessop: Embolism of both Central Arteries of the Retina.—Mr. C. Wray: The Development of Myopia.—Mr. S. Snell: (1) Congenital Papilloma of the Conjunctiva; (2) Periarteritis of the Central Artery of the Retina; (3) Work of Forest Scenery, illustrated from paintings by an amateur artist who had previously undergone cataract extraction.—Mr. S. Stephenson: A Case of Ophthalmitis associated with Basal Meningitis.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—Specimens will be shown by Dr. Elder and Mr. Furneaux Jordan. Discussion on Indications for the Removal of the Uterine Appendages.

FRIDAY (15th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Mr. R. M. Gunn: On Visual Sensations. (Bowman Lecture).

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (11th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Galloway: Consultation. (Skin.)

LONDON THROAT HOSPITAL (204, Gt. Portland-street, W.).—4.30 P.M. Dr. Cathcart: Impaired Movements of Vocal Cords. (Post-graduate Course.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. Beddard: Food and Diet in Disease.

TUESDAY (12th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. Goodhart: Consultation. (Medical.)

WEDNESDAY (13th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Berry: Consultation. (Surgical.)

EVELINA HOSPITAL (Southwark-bridge-road, S.E.).—4.30 P.M. Mr. D. Pedley: Practical Hints on the Treatment of Carious Teeth. (Post-graduate Course.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. Perkins: Mediastinal Growths.

THURSDAY (14th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. J. Hutchinson: Consultation. (Surgical.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. Beddard: Food and Diet in Disease.

CHARING-CROSS HOSPITAL.—4 P.M. Mr. Wallis: Surgical Cases. (Post-graduate Course.)

FRIDAY (15th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—2.30 P.M. Dr. H. Campbell: Class. Clinical Consultation of the Nervous System. Demonstration V. 4 P.M. Mr. H. Spicer: Consultation. (Eye.)

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